

SEEN BY THE  
MEDICAL OFFICER

① N.O.H. W  
② J.P.H.



CITY OF MANCHESTER.

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# ABRIDGED REPORT

ON THE

Health of the City of Manchester,


FOR

1940 AND 1941,

BY

R. VEITCH CLARK, K.H.P., M.A., M.B., CH.B., B.Sc., D.P.H.

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PUBLIC HEALTH DEPARTMENT,  
TOWN HALL,  
MANCHESTER, 2.

12th November, 1942.

My Lord Mayor, Aldermen, and Members of the Council.

I beg to submit the annual reports on the public health of the city for the years 1940 and 1941. These reports are of an abridged character in accordance with the Circular issued by the Ministry of Health and give in summary form the main facts only.

The general statistics are shown on the first page of each of the reports and it is important that, in considering these, the rates should not be accepted without qualification for the purposes of comparison with the corresponding rates of previous years. In particular, this is true of the general death rate and the general birth rate, both of which are "crude" rates. By this is meant that they are not corrected for age or sex distribution and, as the population of the city has been materially altered in these respects by the departure of a large proportion of the younger members of the populace for service in H.M. Forces, munitions, etc., it is clear that the remaining population must, owing to its higher average age, correspondingly have a higher mortality risk. For parallel, but not similar, reasons the birth rate is also to be looked upon as a "crude" figure.

Two disease groups are generally found to exhibit increases during war periods and it is of interest to observe that the first of these groups, *i.e.*, venereal disease, does not show any material increase during the years 1940 or 1941. The other group, that of tuberculosis, does, however, show an increase comparable to that which has occurred throughout the country. The details of this increase will be found summarised in the sections dealing with tuberculosis in each report.

As in 1939, there is no reference made to the work which has been carried out by the department in connection with Civil Defence and Emergency Medical Services inasmuch as these do not form part of the normal public health work with which these annual reports are concerned. Full records of the work which has been done in these two services are kept in the department for any future use.

Similarly, full records of the public health work normally contained in the annual reports on the health of the City are also being kept in the department so that they may be available, if desired, for reference or for future publication.

These two annual reports are the last which I shall have the honour of preparing and I take this opportunity of acknowledging most gratefully the courtesy and loyal support I have experienced throughout a period of twenty years in Manchester, both from the City Council and from my colleagues, not only in the Public Health Department but in all departments of the Corporation.

I have the honour to be,

My Lord Mayor, Ladies and Gentlemen,

Your obedient servant,

R. VEITCH CLARK.

## GENERAL STATISTICS FOR 1940.

Area of the City in acres	.. .. .	27,255
Census population for year 1931	<div> <div> Males .. 360,976  Females 405,402 </div> <div>.. .. .</div> </div>	766,378
Estimated population at the middle of year 1940	<div> <div> Males .. 308,044  Females 345,956 </div> <div>.. .. .</div> </div>	654,000
No. of persons per acre	.... .. .	24
Persons married per 1,000 of population	.. .. .	27.51
Live Births	<div> <div> Males .. 5,373  Females 5,015 </div> <div>.. .. .</div> </div>	10,388
Live-birth rate per 1,000 of population	.. .. .	15.88
Still-births	<div> <div> Males .. 258  Females 220 </div> <div>.. .. .</div> </div>	478
Deaths	<div> <div> Males .. 5,802  Females 5,223 </div> <div>.. .. .</div> </div>	11,025
Recorded annual death-rate per 1,000 of population	<div> <div> Males .. 18.83  Females 15.09 </div> <div>.. .. .</div> </div>	16.86
Deaths under 1 year of age per 1,000 births	.. .. .	69.70
Maternal mortality (per 1,000 live and still births)	.. .. .	2.39
Excess of deaths over registered births	.. .. .	637
Percentage of mortality occurring in public institutions	.. .. .	47.85
<hr/>		
No. of occupied Structurally Separate Dwellings (Census, 1931)	.. .. .	177,430
No. of persons per occupied Structurally Separate Dwelling (Census 1931)	.. .. .	4.32
No. of persons per house 1940 (Based on 206,272 houses connected with the water supply within the City)	.. .. .	3.17
No. of houses erected during 1940 :—		
By Local Authority	.. .. .	283
By other bodies or persons	.. .. .	102
		385



## CHIEF CAUSES OF DEATH, 1936-1940.

	1936	1937	1938	1939	1940
Tuberculosis of the Lungs .. .. .	671	664	620	598	685
Tuberculosis (other forms) .. .. .	109	119	105	103	83
Diseases of the Heart .. .. .	1881	1944	1781	1922	2311
Cerebral Haemorrhage, Apoplexy, Hemiplegia	354	277	327	297	333
Pneumonia .. .. .	777	715	582	411	554
Bronchitis .. .. .	508	452	321	422	929
Digestive Organs .. .. .	389	399	365	348	336
Atrophy, Debility (Chiefly in Infants) .. ..	31	17	29	31	28
Old Age .. .. .	660	662	582	592	570
Premature Birth .. .. .	234	213	192	161	165
Nephritis and Bright's Disease .. .. .	271	233	240	264	260
Convulsions .. .. .	26	36	38	31	35
Inflammation of the Brain .. .. .	15	16	17	17	29
Diarrhoea and Dysentery .. .. .	73	81	87	74	97
Measles .. .. .	121	45	57	—	27
Scarlet Fever .. .. .	10	9	9	1	1
Whooping Cough .. .. .	47	53	14	28	6
Diphtheria .. .. .	92	90	54	35	47
Influenza .. .. .	128	304	85	155	225
Malignant Disease .. .. .	1250	1247	1286	1221	1254

Estimated Populations. Annual Rates of Marriages, Births, and Deaths (a) from all Causes, (b) from Specified Causes, and (c) Infantile Mortalities; also the Percentages to Total Deaths of Inquest Cases and of Deaths in Public Institutions; also Quinquennial Averages, 1871-1940.

Year	Estimated Population  (Mean)	Marri- age Rate per 1,000 persons living	Annual Rates per 1,000 persons living										Percentage to Total Deaths		Infantile Mortality	Year		
			Deaths (all causes)	Smallpox	Measles	Scarlet Fever	Diphtheria	Whooping Cough	Typhus Fever	Enteric Fever	Simple Continued Fever	Diarrhoeal Diseases	Violence	Inquest Cases			Deaths in Public Institutions	
Quinquennial Average	1871-1875	24.6	38.9	28.3	0.26	0.64	1.08	0.08	0.78	0.14	0.43	0.21	1.95	0.94	7.2	13.4	198	.. 1871-1875
	1876-1880	18.6	38.7	26.2	0.24	0.53	1.07	0.13	0.84	0.08	0.29	0.11	1.26	0.89	7.5	14.3	172	.. 1876-1880
	1881-1885	17.9	35.1	23.6	0.04	0.71	0.48	0.10	0.68	0.05	0.20	0.03	0.99	0.72	7.0	15.9	175	.. 1881-1885
	1886-1890	16.6	33.4	24.6	0.02	0.83	0.50	0.32	0.54	0.02	0.30	0.01	1.08	0.78	6.9	17.7	183	.. 1886-1890
	1891-1895	16.9	33.2	23.6	0.03	0.62	0.26	0.27	0.64	0.00	0.24	0.01	1.19	0.77	7.1	19.2	186	.. 1891-1895
	1896-1900	18.2	32.5	22.7	..	0.89	0.20	0.13	0.53	0.00	0.18	0.01	1.69	0.73	7.1	20.2	192	.. 1896-1900
	1901-1905	17.4	30.9	20.1	0.01	0.55	0.19	0.22	0.41	0.00	0.13	0.00	1.15	0.72	7.1	24.4	173	.. 1901-1905
	1906-1910	17.0	28.1	17.7	..	0.54	0.16	0.17	0.37	0.00	0.10	0.00	0.76	0.68	7.4	27.3	147	.. 1906-1910
	1911-1915	17.6	24.8	16.4	..	0.50	0.12	0.14	0.25	..	0.05	..	0.84	0.67	7.9	30.8	133	.. 1911-1915
	1916-1920	16.7	19.2	14.1	..	0.24	0.04	0.08	0.21	..	0.02	0.00	0.30	0.49	6.4	32.3	105	.. 1916-1920
	1921-1925	16.8	20.6	13.9	..	0.25	0.06	0.10	0.20	..	0.01	..	0.33	0.44	5.7	37.8	95	.. 1921-1925
	1926-1930	17.3	17.4	13.8	..	0.18	0.02	0.11	0.14	..	0.01	..	0.24	0.46	4.8	42.9	88	.. 1926-1930
	1931-1935	16.8	15.0	13.1	..	0.11	0.02	0.10	0.08	..	0.00	..	0.15	0.46	5.0	48.5	77	.. 1931-1935
	1936-1940	20.6	14.8	13.8	..	0.07	0.01	0.09	0.04	..	0.00	..	0.11	0.59	4.8	52.0	71	.. 1936-1940
*†1936	..	17.7	14.7	13.5	..	0.16	0.01	0.12	0.06	..	0.00	..	0.09	0.46	4.7	52.2	77	.. 1936
†1937	..	19.1	14.3	13.5	..	0.06	0.01	0.12	0.07	..	0.00	..	0.11	0.44	4.3	53.9	76	.. 1937
†1938	..	17.9	14.8	12.4	..	0.07	0.01	0.07	0.02	..	0.00	..	0.12	0.45	4.9	53.8	69	.. 1938
†1939	..	20.9	14.1	12.8	..	..	0.00	0.05	0.04	..	0.00	..	0.10	0.60	5.6	51.8	61	.. 1939
†1940	..	27.5	15.9	16.9	..	0.04	0.00	0.07	0.01	..	0.00	..	0.15	1.01	4.7	47.9	70	.. 1940

The populations and rates prior to 1891 are those for the Unions of Manchester, Chorlton and Prestwich, which have been taken as approximately representing "Manchester." The City was extended to include Moss Side and Withington in 1904, Gorton and Levenshulme in 1909 and Wythenshawe in 1931.

\* The population for calculating the death rates for 1936 = 771,018, as the facts for this year are for 53 weeks.

† Populations calculated on number of Parliamentary electors proportionate to the number at the census 1931.

‡ This population represents the number of food ration cards issued in July, 1940.



## ANNUAL RATES OF MORTALITY FROM CERTAIN CAUSES OF DEATH.

YEAR	ANNUAL RATES PER 1,000 PERSONS LIVING										RATES PER 1,000 BIRTHS	
	Cancer	Tuberc. Peritonitis Tabes Mes.	Phthisis	Other Tuberc. Diseases	Diseases of Nervous System	Diseases of Heart and Blood Vessels	Diseases of Respiratory System	Diseases of Digestive System	Diseases of Urinary System	Diseases of Generative System	Puerperal Fever	Childbirth
81-1885 ..	0.50	0.35	2.42	0.57	3.28	1.37	5.41	1.23	0.48	0.08	3.03	1.99
86-1890 ..	0.64	0.36	2.24	0.59	3.09	1.73	5.76	1.23	0.61	0.08	3.22	2.13
91-1895 ..	0.62	0.22	2.09	0.75	1.74	2.53	5.56	1.07	0.52	0.07	2.75	3.42
96-1900 ..	0.73	0.19	2.04	0.63	1.32	2.54	5.03	1.04	0.49	0.09	1.55	1.51
01-1905 ..	0.80	0.16	1.94	0.55	1.17	2.56	4.29	0.95	0.49	0.08	1.21	1.76
06-1910 ..	0.88	1.14	1.65	0.45	0.95	2.56	3.75	0.84	0.54	0.07	1.28	1.49
11-1915 ..	1.01	0.12	1.59	0.38	0.79	2.34	3.45	0.68	0.56	0.09	1.24	2.14
16-1920 ..	1.08	0.09	1.39	0.28	0.54	2.27	2.98	0.51	0.47	0.06	1.58	1.82
21-1925 ..	1.34	0.06	1.26	0.24	0.51	2.58	3.03	0.47	0.46	0.07	1.54	2.04
26-1930 ..	1.45	0.03	1.16	0.19	0.48	3.05	2.66	0.45	0.50	0.07	1.74	2.80
31-1935 ..	1.61	0.02	1.00	0.13	0.41	3.68	1.95	0.46	0.48	0.05	*1.47	*2.40
36-1940 ..	1.72	0.01	0.89	0.13	0.38	4.42	1.71	0.50	0.52	0.06	1.14	2.68
36.. ..	1.62	0.02	0.87	0.12	0.39	4.10	1.83	0.50	0.49	0.07	1.69	3.29
37.. ..	1.66	0.01	0.88	0.15	0.36	4.12	1.69	0.53	0.48	0.07	1.34	2.85
38.. ..	1.72	0.01	0.83	0.13	0.35	3.98	1.32	0.49	0.47	0.06	1.39	2.86
39.. ..	1.66	0.02	0.81	0.12	0.38	4.32	1.24	0.47	0.57	0.07	0.83	2.48
40.. ..	1.92	0.01	1.05	0.11	0.43	5.60	2.45	0.51	0.61	0.04	0.46	1.93

\* From the Year 1931 the Maternal Mortality rates are calculated on per 1,000 births (Live and Stillbirths).

## NOTIFIABLE INFECTIOUS DISEASES OTHER THAN WHOOPING COUGH AND TUBERCULOSIS.

The diseases included in the Public Health Act, 1936, or regulations under the Public Health Acts, are as follows:—Smallpox, Scarlet Fever, Diphtheria, Membranous Croup, Typhus Fever, Enteric or Typhoid Fever, Paratyphoid Fever, Relapsing Fever, Puerperal Pyrexia, Erysipelas, Ophthalmia Neonatorum, Cerebro-Spinal Fever, Poliomyelitis, Polio-Encephalitis and Encephalitis-Lethargica, Malaria, Dysentery, Acute Primary Pneumonia, Acute Influenzal Pneumonia, Measles, Rubella, and Pemphigus Neonatorum. The cases notified in 1940 are compared with the average of the previous ten years:—

	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	Mean	1940
Smallpox .. .. .	2	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever .. .. .	3,701	2,913	2,283	1,773	2,080	2,795	2,402	2,578	2,396	1,258	2,418	722
Diphtheria .. .. .	838	573	885	732	866	903	1,202	1,397	1,193	799	939	716
Typhus Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..
Typhoid Fever .. .. .	33	24	39	14	14	20	15	7	6	28	20	8
Paratyphoid Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	59
Relapsing Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever .. .. .	156	139	96	128	107	132	106	71	} <sup>a</sup> 223	206	218	169
Puerperal Pyrexia .. .. .	88	80	76	77	119	122	136	123				
Erysipelas .. .. .	501	399	334	377	363	408	370	341	404	259	375	222
Ophthalmia Neonatorum .. .. .	144	119	108	107	122	140	122	116	132	137	124	140
Cerebro-Spinal Fever .. .. .	22	38	27	45	40	49	62	50	43	30	41	175
Poliomyelitis .. .. .	3	4	5	8	14	7	29	1	9	26	11	7
Polio-Encephalitis .. .. .	..	..	..	3	2	1	2	1	1	..	1	1
Encephalitis-Lethargica .. .. .	23	24	9	3	6	4	..	5	4	..	8	1
Malaria .. .. .	1	1	1	..	..	2	2	..	..	..	1	..
Dysentery .. .. .	17	6	2	..	3	7	1	6	46	13	10	112
Primary Pneumonia .. .. .	2,059	2,005	1,047	1,34	1,496	2,105	1,973	1,969	1,543	1,084	1,801	1,895
Influenzal Pneumonia .. .. .	290	480	51	793	178	375	240	458	103	194	343	179
Measles .. .. .	10,738	7,771	12,23	6,350	11,383	9,907	8,807	6,550	9,949	574	8,427	14,819
Rubella .. .. .	237	2,553	1,68	334	342	1,180	866	824	375	739	914	3,543
Pemphigus Neonatorum .. .. .	112	64	4	41	33	25	36	43	48	33	48	37
	18,965	17,193	20,20	12,519	17,168	18,173	16,371	14,540	16,475	5,380	15,699	22,805

In 1900 Erysipelas was made notifiable, in 1910 Ophthalmia Neonatorum, in 1912 Cerebro-Spinal Fever and Poliomyelitis. Measles and Rubella were made notifiable in Manchester 1916, and Polio-Encephalitis, Encephalitis-Lethargica, Malaria, Dysentery, Primary Pneumonia, Influenzal Pneumonia in 1919, in 1925 Pemphigus Neonatorum.

Puerperal Pyrexia was made notifiable on October 1st, 1926.

<sup>a</sup> The Public Health Act 1936 provides that Puerperal Pyrexia includes the obligation to notify conditions at present notifiable as Puerperal Fever as from October 1st, 1937.

The Puerperal Pyrexia Regulations, 1939, replace the term "Puerperal Fever" by the term Puerperal Pyrexia as from 1st April, 1939.

Measles and Whooping Cough were made compulsorily notifiable February, 1940. German Measles is notifiable under the Manchester German Measles Regulations, 1920.



The deaths from the more common diseases are shown in the following figures :—

Years	Measles	Scarlet Fever	Diphtheria	Enteric Fever	Influenza	Whooping Cough	Diarrhoea	Phthisis
1930—39 average	93	13	76	4	281	74	125	787
1940 ..	27	1	47	2	225	6	97	685

### IMMUNISATION AGAINST DIPHTHERIA.

Number of Persons dealt with in 1940.

	Numbers having received complete course of prophylactic treatment	Numbers having received incomplete course of prophylactic treatment
Schools .. .. .	1,344	384
Child Welfare Centres .. .. .	1,991	22
Hospitals .. .. .	255	86
Public Health Office .. .. .	69	11
General Practitioners .. .. .	46	2
Totals .. .. .	3,705	505

Toxoid-Antitoxin Floccules is used for the immunisation of all children treated at the schools. The dosage employed is three 1 c.c. injections at weekly intervals.

Alum Precipitated Toxoid in two doses of 0.1 c.c. and 0.4 c.c., with 2—3 weeks interval, is used for most children under 8 years immunised at the welfare centres and at the Public Health Office.

Prophylactics—T.A.F. and A.P.T. are in use at the hospitals. T.A.F. is supplied free to general medical practitioners in the city.

#### Prophylactics Used in Immunising Pre-School and School Children.

Age Group	Number having received a full course of injections	Prophylactic Used		
		T.A.F.	A.P.T.	T.A.M.
Under 5 years .. .. .	2,334	283	2,049	2
5—14 years .. .. .	1,266	1,143	107	16
Totals— Under 15 years .. .. .	3,600	1,426	2,156	18

Although Schick testing is not practised as a routine in connection with the greater part of the scheme, 1,246 primary tests were performed during the year. 266 gave a positive result and 980 were negative. These were carried out largely among hospital patients and staff.

Facilities are available at the Public Health Office for posterior Schick testing in cases where it is considered advisable. 25 such tests were carried out with 8 positive and 17 negative results.

The following table illustrates the progress of the immunisation scheme since its inception :—

Number of Persons, in Age Groups, having had Full Course of Injections.

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	
Under 1 year ..	—	20	162	248	212	598	595	691	963	822	1071	915	740	503	Total under 5 years at end of 1940 11,190
1-year ..	3	50	269	313	331	813	743	805	1219	1328	1169	1228	965	912	
2 years ..	5	54	226	197	254	579	613	788	1033	863	890	894	576	409	
3 „ ..	8	44	221	202	206	482	733	668	1146	782	901	824	476	272	
4 „ ..	16	33	238	164	210	458	744	664	1333	801	906	856	475	238	
5 „ ..	9	36	269	152	208	473	921	997	1256	702	951	866	464	192	Total 5—9 years 28,698
6 „ ..	19	30	281	127	186	406	1015	987	1309	772	972	878	447	222	
7 „ ..	20	17	291	105	137	365	1002	1076	1242	751	890	832	382	195	
8 „ ..	10	20	281	82	131	336	876	1415	1150	810	857	711	408	179	
9 „ ..	4	21	230	65	107	282	852	1301	1241	804	678	583	336	162	
10 „ ..	3	7	63	62	98	231	711	1376	1002	923	698	613	308	137	Total 10—14 years 33,587
11 „ ..	5	10	39	46	62	247	486	1061	907	703	459	444	274	86	
12 „ ..	2	7	42	29	36	266	345	630	825	772	419	395	218	43	
13 „ ..	2	6	21	22	33	119	280	438	820	615	424	396	259	39	
14 „ ..	2	—	4	15	22	48	76	247	191	96	117	79	49	11	
15 years and over..	—	7	41	39	48	121	67	371	1201	917	444	240	102	105	Total 15 years and over 25,303
Totals 1927—1940	108	362	2678	1868	2281	5824	10059	13515	16838	12461	11846	10754	6479	3705	98,778

The totals at the end of 1940 indicate only approximately the immune population, since no account is taken of any deaths that may have ensued subsequently.



## CEREBRO-SPINAL FEVER.

One hundred and seventy-five cases of cerebro-spinal fever were notified and accepted as such, the diagnosis being confirmed bacteriologically in 85 of them. The cases were widely spread over the city and no particular focus of infection was evident.

There were 50 deaths from this disease, giving a case mortality rate of 28·6 per cent., which compares with a rate of 20 per cent. in 1939.

As regards seasonal prevalence, 52 cases occurred in the first quarter of the year, 61 in the second, 30 in the third and 32 in the last quarter.

## FOOD POISONING.

Twenty investigations were carried out during the year into illness thought to be food poisoning, affecting a total of forty-eight individuals. In no one instance were more than four persons affected. The illness was brought to the notice of the department in five instances by general practitioners, seven by medical officers of hospitals, four by the police, and the remainder by affected individuals or their relatives.

Two of the investigations suggested that the illness was not food poisoning. In a third, a complaint of glass present in tinned salmon was found to have been caused by the presence of crystals of magnesium ammonium phosphate, which is often found in fairly dry packed tinned salmon.

Food poisoning organisms were isolated from five patients who had been admitted to hospital. In these cases no food could with certainty be held responsible. The organisms were *B. Aertrycke* in four cases and *B. Thompson* in the fifth.

In three investigations, staphylococci were isolated from the suspected food remaining in opened tins, and the symptoms of the persons affected suggested poisoning by a staphylococcal toxin. Sample tins from the same sources as the infected tins were sound and sterile when examined.

In six of the remaining nine investigations the evidence pointed to tinned food as the probable cause of illness, but bacteriological confirmation was not obtained, nor was there conclusive evidence of bacterial food poisoning in the other three cases.

## MONSALL HOSPITAL.

At the close of the year 1939, 140 patients remained in hospital. During 1940, 3,371 were admitted. The total number under treatment during the year was 3,511. There were 117 deaths and 3,109 were discharged cured.

285 remained in hospital at the end of the year.

The largest total number of cases admitted to hospital was during the month of October, when 355 cases were received. The maximum number of patients in hospital was 331 on October 29th, and the minimum number was 137 on January 2nd, 1940.

The average daily number of patients in hospital for the year was 242·05, as against 262·9 in the year 1939.

The average duration of stay for each patient was 27·8 days, as against 28·4 in 1939.

The fatality rate for all cases under treatment was 3·6 per cent., as compared with 2·7 during 1939.

In 501 cases, or 15·5 per cent., the diagnosis was altered from the certified disease.

### Scarlet Fever.

Forty-five cases remained in hospital at the end of the previous year, and during the year 620 were admitted, showing a decrease of 394 on the previous year. The number of discharges was 610; there were no deaths.

The average stay in hospital was 27·3 days, showing a decrease of 3·8 days on the previous year.

Diphtheria.

The number of patients admitted certified as diphtheria was 917 as against 985 in 1939, showing a decrease of 68. The total number under treatment was 989. There were 816 discharges and 45 deaths; 16 deaths occurred within 48 hours of admission. The gross fatality rate was 5·2 per cent., as against 3·6 during the previous year, or 3·4 excluding the 16 deaths referred to.

Ninety-two cases out of the total were diagnosed as diphtheria carriers; excluding these carrier cases the fatality rate is 5·9.

The average stay in hospital of the patients who recovered was 44·1 days, and for fatal cases 8·5 days.

193 cases certified diphtheria were found to be suffering from some other disease; of these cases 4 proved fatal.

Enteric Fever Group.

In hospital at commencement of year	..	..	..	..	0
Admitted during the year	..	..	..	..	102
Incorrectly diagnosed	..	..	..	..	21
Remaining in hospital at end of year	..	..	..	..	3
Discharged	..	..	..	..	77
Died	..	..	..	..	1
Average day of disease on admission	..	..	..	..	11th
Average stay in hospital	..	..	..	..	33 days.
Average age of patients	..	..	..	..	26·4 years.

Four patients were transferred to other hospitals.

The type of disease in the cases diagnosed as enteric fever was :—

	Cases	Recovered	Died
Typhoid.. .. .	8	8	..
Paratyphoid B .. .. .	69	68	1*
„ C .. .. .	1	1	..

\* Death was not due to paratyphoid B, but to exacerbation of pre-existing carditis with auricular fibrillation and contributed to by paratyphoid B, death occurring on the 70th day after the commencement of the enteric infection.

Erysipelas.

113 cases were admitted and 110 cases were discharged.

One death occurred, giving a mortality rate of 0·9 per cent., as against 0·8 per cent. in the previous year.

The striking fall in the mortality of erysipelas following the introduction of treatment with sulphonilamide continues.

Measles.

449 cases of measles were admitted, and 396 were discharged. Eight deaths occurred, giving a case mortality rate of 1·9 per cent. Thirty-nine cases were complicated by broncho-pneumonia, and all deaths were due to this cause.

Whooping Cough.

Nineteen cases of whooping cough were admitted, as against 163 in the previous year. There were 2 deaths, giving a death rate of 10·5 per cent., as against 3·1 per cent. in 1939.

The cause of death in the fatal cases was broncho-pneumonia.



### Cerebro-Spinal Fever.

129 cases of meningococcal meningitis were treated during the year. Of these, 16 died and 113 recovered, giving a fatality rate of 12.4 per cent. Ten patients died within 48 hours of admission and, excluding these, the fatality rate from this disease was 5.04 per cent.

	No. of Cases	Male	Female	Died	Recovered	Case Mortality per cent.	
						Total	Excluding Deaths in 48 hours
Under 1 year .. ..	10	5	5	3	7	30.0	12.5
1 to 5 years .. ..	13	8	5	2	11	15.4	..
5 ,, 10 ,, .. ..	13	9	4	1	12	7.7	..
10 ,, 20 ,, .. ..	25	15	10	1	24	4.0	..
20 .. ..	68	43	25	9	59	13.2	7.8
	129	80	49	16	113	12.4	5.04

Average day of disease on admission to hospital :—

Recoveries : 4th.

Deaths : 5th.

Average day of disease on which death occurred : 12th.

Excluding one patient who died from a suppurative pneumonitis on the 63rd day of disease, the average day of disease on which death occurred was the 9th.

All cases were treated with sulphonilamide or sulphapyridine. In addition a few cases were given intravenous or intramuscular serum.

### Puerperal Infection.

At the beginning of the year 5 patients were still under treatment in the unit. During the year 144 patients were admitted for treatment of abnormal conditions arising in the puerperium or in association with abortion; 44 of these were abortal cases; 139 were discharged and 5 were transferred for treatment to other institutions. One patient was still in hospital at the end of the year. There were four deaths. One of these was due to luetic cerebral thrombosis and was unconnected with puerperal or abortal conditions. One occurred in a puerperal and two in post-abortal cases.

### Numbers of Various Diseases Treated.

	In Hospital, Jan. 1st, 1940	Admitted	Discharges and Deaths	Remaining in Hospital, Dec. 31st, 1940
Scarlatina .. .. .	45	620	610	55
Diphtheria and Diphtheria Carriers..	72	917	861	128
Enteric Fever Group .. .. .	..	81	78	3
Erysipelas .. .. .	3	113	111	5
Puerperal Fever and Pyrexia .. ..	5	144	148	1
Measles .. .. .	3	449	404	48
Other Diseases .. .. .	12	1,047	1,014	45
	140	3,371	3,226	285

## GENERAL HOSPITALS AND INSTITUTIONS.

General Statistics for the Year ended 31st December, 1940.

IN-PATIENTS	GENERAL HOSPITALS			SPECIAL ESTABLISHMENTS				INSTITUTIONS		TOTALS
	Crumpsall Hospital	Withington Hospital	Booth Hall Hospital	Rose Hill Convalescent Home	Langho Colony	Swinton Home	Dr. Garrett Memorial Home	§ Park House (Mental Wards)	§ Withington Institution (Aged and Infirm Wards)	
1. Total number of admissions (including infants born in hospital) .. .. .	10,414	10,273	4,456	232	83	24	160	2,425	694	28,761
*2. Number of women confined in hospital .. .. .	1,216	1,193	..	..	..	..	..	..	..	2,409
3. Number of live births ..	1,150	1,142	..	..	..	..	..	..	..	2,292
4. Number of still-births ..	73	66	..	..	..	..	..	..	..	139
†5. Number of deaths among the newly-born ( <i>i.e.</i> , under four weeks of age) .. .. .	37	28	..	..	..	..	..	..	..	65
6. Total number of deaths among children under one year (including those given under 5) .. .. .	43	33	196	..	..	..	..	..	..	272
7. Number of maternal deaths among women confined in hospital .. .. .	5	1	..	..	..	..	..	..	..	6
8. Total number of deaths ..	1,660	1,626	304	..	25	4	..	256	321	4,190
9. Total number of discharges (including infants born in hospital) .. .. .	8,744	8,448	3,895	295	67	25	70	1,909	362	23,815
10. Duration of stay of patients included in 8 and 9 above—										
(a) Four weeks or less ..	7,917	7,679	3,064	110	3	2	9	1,807	41	20,632
(b) Exceeding four but under thirteen weeks..	2,014	2,042	932	102	7	1	31	168	164	5,461
(c) Exceeding thirteen weeks .. .. .	473	353	203	83	82	26	30	190	478	1,911
11. Number of beds occupied—										
(a) Average during the year .. .. .	1,094	739	305	56	619	123	36	964	715	4,651
(b) Highest.. .. .	1,235 on 6-3-40	878 on 22-2-40	428 on 4-4-40	93 on 13-4-40 Empty on 19-11-40	631 on 16-4-40	132 on 17-7-40	109 on 19-11-40	1,217 on 12-10-40	747 on 21-2-40	..
(c) Lowest .. .. .	895 on 1-11-40	547 on 25-12-40	139 on 20-11-40	..	609 on 4-10-40	112 on 1-8-40	2 on 30-4-40	875 on 31-12-40	694 on 8-9-40	..
‡12. Number of surgical operations under general anaesthetic (excluding dental operations)	1,488	1,405	1,045	..	..	..	..	..	..	3,938
13. Number of abdominal sections	649	612	149	..	..	..	..	..	..	1,410

\* Relates to women discharged from or dying in hospital during the year.

† This figure relates only to children born in hospital.

‡ Including spinal anaesthesia.

§ Information shown includes evacuees admitted from other local authorities.

*Average Duration of Stay.*

The average duration of stay in hospital for all cases in 1940 was 31·46 days, as compared with 30·83 days in 1939, and 26·82 days in 1938. The table shows details of the last six years.

Hospital	Average Duration of Stay of Patients Discharged from or Dying in the Three General Hospitals					
	1935—Days	1936— Days	1937—Days	1938—Days	1939—Days	1940—Days
Booth Hall .. .. .	24·23	32·31	28·12	25·41	27·43	26·05
Crumpsall .. .. .	31·22	34·91	30·32	28·03	34·21	38·93
Withington .. .. .	32·30	28·41	26·65	26·15	28·85	26·01
All Three Hospitals .. ..	30·51	31·54	28·45	26·82	30·83	31·46

## PATHOLOGICAL SERVICES FOR THE MANCHESTER MUNICIPAL GENERAL HOSPITALS.

There has been an increase of approximately 5,000 in the number of examinations carried out during 1940 as compared with 1939. This is due chiefly to the increase in specimens from Crumpsall Hospital, which show a significant rise.

The service has taken on a larger amount of work for the Manchester and Salford Blood Transfusion Service; and the "blood banks" established at Crumpsall and Withington Hospitals have increased the efficiency of blood transfusion services for the municipal hospitals generally.



# **EXAMINATIONS MADE AT THE MUNICIPAL HOSPITAL PATHOLOGICAL LABORATORIES DURING THE YEAR ENDED DECEMBER 31st, 1940.**

TYPE OF EXAMINATION	AT CRUMPSALL LABORATORY FOR			AT WITHINGTON LABORATORY (for Withington)	TOTALS
	Crumpsall Hospital	Booth Hall Hospital	Withington Hospital		
Swabs—					
Diphtheria cultural examinations .. .. .	191	10,731	..	91	11,013
Diphtheria virulence tests .. .. .	3	58	5	..	66
Sputum—					
Microscopical examination for tubercle bacilli .. .. .	4,496	88	..	4,621	9,205
Biological tests .. .. .	9	..	..	..	9
Pneumococcus typing .. .. .	692	2	..	24	718
Microscopical examination .. .. .	532	3	..	..	535
Cultural examination .. .. .	526	2	..	..	528
Concentration test for tubercle bacilli .. ..	24	7	..	106	137
Miscellaneous examinations (including sputum for foreign bodies, neoplasm cells) .. .. .	2	..	..	..	2
Blood—					
Counts .. .. .	3,022	390	..	1,779	5,191
Reticulocytes .. .. .	89	8	..	..	97
Sternal puncture .. .. .	6	..	1	..	7
Grouping .. .. .	212	24	..	152	388
Compatibilty tests .. .. .	118	..	..	128	246
Bleeding time .. .. .	5	15	..	11	31
Coagulation time .. .. .	5	15	..	10	30
Platelet count .. .. .	11	14	..	..	25
Sedimentation rate .. .. .	1	..	..	102	103
Red cell fragility test .. .. .	2	2	..	..	4
Sugar .. .. .	1,344	13	..	2,312	3,669
Urea .. .. .	1,230	136	..	627	1,993
Calcium .. .. .	25	5	..	3	33
Van den Bergh .. .. .	51	1	..	16	68
Phosphorous .. .. .	11	3	..	..	14
Spectroscopic examination .. .. .	6	..	3	..	9
Cultural examination .. .. .	548	38	..	51	637
Agglutination test .. .. .	104	39	..	39	182
Paul Bunnell reaction .. .. .	3	..	..	..	3
Miscellaneous examination (including blood- methaemoglobin, sulphaemoglobin) .. ..	167	25	12	..	204
Smears—					
Gonococci .. .. .	740	28	..	63	831
Faeces—					
Microscopical examination .. .. .	12	17	..	26	55
Cultural examination .. .. .	209	309	..	78	596
Chemical examination .. .. .	1,047	10	..	143	1,200
Urine—					
Microscopical examination .. .. .	2,419	364	..	1,018	3,801
Cultural examination .. .. .	2,265	364	..	819	3,448
Urea examination .. .. .	248	7	..	187	442
Ascorbic acid .. .. .	..	2	..	..	2
Phenol red test .. .. .	9	..	..	..	9
Biological tests .. .. .	13	1	5	..	19
Miscellaneous examination (including urine- diastase, chlorides, bromide, etc.) .. ..	29	7	8	..	44
Cerebro-spinal fluid—					
Microscopical examination .. .. .	364	405	..	220	989
Cultural examination .. .. .	145	234	..	20	399
Chemical examination .. .. .	350	273	..	205	828
Colloidal gold curve .. .. .	80	10	67	..	157
Miscellaneous examination (including C.S.F.- typing, meningococcus grouping) .. ..	3	12	..	..	15
Pus—					
Microscopical examination .. .. .	474	155	..	214	843
Cultural examination .. .. .	368	222	..	195	785
Biological tests .. .. .	7	7	2	..	16
Pneumococcus typing .. .. .	3	1	..	..	4
Miscellaneous examination (including con- centration test for tubercle bacilli, protein estimation, etc.) .. .. .	3	..	..	..	3
Effusions—					
Microscopical examination .. .. .	287	53	18	96	454
Cultural examination .. .. .	268	49	12	92	421
Biological tests .. .. .	35	12	24	..	71
Pneumococcus typing .. .. .	7	3	..	..	10
Friedman tests .. .. .	55	2	40	..	97
Fractional gastric analysis .. .. .	282	..	..	199	481
Stomach contents—					
Microscopical examination .. .. .	1	23	..	..	24
Biological tests .. .. .	..	22	..	..	22
Histological preparations .. .. .	1,344	134	..	1,018	2,496
Post-mortem examinations .. .. .	416	87	..	222	725
Carried forward .. .. .	24,918	14,432	197	14,887	54,434



**Examinations made at the Municipal Hospital**  
**Pathologica Laboratories—continued**

TYPE OF EXAMINATION	AT CRUMPSALL LABORATORY FOR			AT WITHINGTON LABORATORY (for Withington)	TOTAL
	Crumpsall Hospital	Booth Hall Hospital	Withington Hospital		
Brought forward .. ..	24,918	14,432	197	14,887	54,434
Vaccines .. .. .	61	10	2	13	86
Basal metabolic rates .. .. .	42	..	..	28	70
Miscellaneous examinations—					
Smears—					
Tr. vaginalis .. .. .	16	..	..	..	16
Serum—					
T. pallidum .. .. .	36	..	..	..	36
Milk—					
Biological tests .. .. .	..	12	..	..	12
Fat content .. .. .	..	6	..	..	6
Bacterial count .. .. .	..	13	..	..	13
Babies' feed and milk bottles—sterility tests, urine-Weil's disease, hairs-tinea, vomit- cultural examination, etc. .. .. .	82	28	2	72	184
WORK DONE FOR MANCHESTER AND SALFORD BLOOD TRANSFUSION SERVICE :—					
Blood groupings .. .. .	194	..	..	83	277
Bleedings .. .. .	587	..	..	522	1,109
Plasma withdrawals .. .. .	345	..	..	288	633
	26,281	14,501	201	15,893	56,876

The following additional examinations were carried out at Crumpsall :—

ROSE HILL CONVALESCENT HOME .. ..	Swabs—				
	Diphtheria cultural examination .. .. .				141
	Haemolytic streptococci .. .. .				84
	Swabs—				
BAGULEY EMERGENCY HOSPITAL .. ..	Diphtheria cultural examination .. .. .				542
	Sputum—				
	Biological test .. .. .				1
	Urine—				
	Microscopical examination .. .. .				1
	Cultural examination .. .. .				1
	Effusion—				
	Microscopical examination .. .. .				1
	Cultural examination .. .. .				1
	Blood count .. .. .				1
R.A.F. CAMP, BOWLEE .. .. .	Vaccines .. .. .				3
	Swabs—				
	Diphtheria cultural examination .. .. .				2
	Haemolytic streptococci .. .. .				2
	Urine—				
	Microscopical examination .. .. .				1
	Cultural examination .. .. .				1
MONSALL HOSPITAL .. .. .	Friedman tests .. .. .				8
	Faeces—				
STYAL HOMES .. .. .	Microscopical examination .. .. .				1
	Cultural examination .. .. .				1
SWINTON HOME .. .. .	Faeces—				
	Microscopical examination .. .. .				1
	Cultural examination .. .. .				1
R.A.O. SCHOOL .. .. .	Faeces—				
	Cultural examination .. .. .				1

The following additional examinations were carried out at Withington :—

BAGULEY EMERGENCY HOSPITAL .. ..	Swabs—				
	Diphtheria cultural examination .. .. .				19
	Urine—				
	Microscopical examination .. .. .				4
	Cultural examination .. .. .				4
	Faeces—				
	Cultural examination .. .. .				10
ROSE HILL CONVALESCENT HOME .. ..	Swabs—				
	Diphtheria cultural examination .. .. .				13

57,721

## TUBERCULOSIS.

The year has been characterised by an increase of the general death rate for the City. Respiratory diseases have been more fatal than in 1939 and the tuberculosis death rate is higher than it has been since 1932.

### Notification.

The notification rate for all forms of tuberculosis in 1940 is 1.94 per 1,000 population, an increase of .31 upon the figure for 1939. The pulmonary rate has increased by .3 and the non-pulmonary by .01.

#### *Pulmonary Tuberculosis.*

The increase in the notifications, 89 in number, amongst males commenced in the 15-year age group and continued to the 45—54 groups. The decennial period which showed no increase was that of 55—64. From 65 years the notifications again continued the upward trend shown in the earlier age groups.

Amongst females the increase was much smaller, namely 13, as compared with 89 in males. The age group affected chiefly was that of 25—34 years. There was another significant rise in the 45—54 age groups, but an unexplained diminution in the figures for those aged 35—44 as compared with 1939. This, it may be noted, was paralleled by the comparatively small rise in the same age group amongst males.

We have, therefore, the common feature of a general increase in the incidence of pulmonary tuberculosis, more marked amongst males than females, and generally spread throughout the ages from 15 years upwards. An exceptional interruption in this rise is noted in the age groups 35—44.

#### *Non-Pulmonary Tuberculosis.*

The very small increase in the notification rate does not present any particular features calling for comment.

### Mortality.

The death rate this year for all forms of tuberculosis is 1.17 per 1,000, being made up of 1.05 for pulmonary tuberculosis and .12 for the non-pulmonary form.

#### *Pulmonary Tuberculosis.*

The total increase in the male deaths was 67 and occurred chiefly in the age groups 25—54. The group aged 65 and upwards also showed an increase. In the age groups 55—64 the deaths were fewer than in 1939. The total female deaths are up by 20. A group showing a diminution is that at ages 20—34.

#### *Non-Pulmonary Tuberculosis.*

There is a decrease here of 0.02 per 1,000. The total figures are small and no particular features emerge either in relation to age or sex.

\*   \*   \*   \*   \*   \*   \*   \*   \*

In considering the above figures, it is to be noted that the increase in the actual numbers of deaths and notifications has taken place amongst a population that has decreased. It is estimated that there were approximately 82,000 fewer persons in Manchester in 1940 than in 1939.

### Thoracic Surgery.

The work done in thoracic surgery has continued to grow and many authorities have taken advantage of the opportunity offered by the Manchester scheme to have their cases treated here. It is not possible at this time to give a full analysis of all the work done, but it is hoped to deal with this in later reports.

The statistics for the year are set out in the following tables :—

**TABLE I.**

*Rates per Thousand of the Population.*

**Comparative Figures.**

	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
<b>DEATH RATES :—</b>													
General .. .. .	13·06	15·51	13·07	13·86	13·03	13·41	12·24	12·91	13·50	13·52	12·35	12·76	16·86
All respiratory diseases (except tuberculosis) .. .. .	2·42	3·25	2·10	2·59	1·98	1·97	1·47	1·73	1·83	1·70	1·32	1·24	2·45
Tuberculosis (all forms) .. .. .	1·29	1·40	1·37	1·29	1·17	1·15	1·13	1·04	1·01	1·04	·97	·95	1·17
Phthisis, both sexes .. .. .	1·10	1·21	1·15	1·12	1·00	1·00	·97	·92	·87	·88	·83	·81	1·05
„ males only .. .. .	1·42	1·54	1·41	1·43	1·23	1·25	1·32	1·17	1·09	1·10	1·04	1·04	1·39
„ females only .. .. .	·80	·91	·91	·82	·79	·78	·66	·69	·67	·69	·64	·61	·74
Non-pulmonary tuberculosis, both sexes .. .. .	·19	·19	·22	·17	·16	·15	·16	·12	·14	·16	·14	·14	·12
<b>TUBERCULOSIS NOTIFICATION RATES :—</b>													
All forms .. .. .	2·51	2·28	2·23	2·32	1·93	1·80	1·79	1·69	1·65	1·90	1·67	1·63	1·94
Pulmonary only .. .. .	1·87	1·79	1·64	1·67	1·41	1·40	1·39	1·30	1·26	1·40	1·27	1·24	1·54
Non-pulmonary only .. .. .	·64	·48	·59	·65	·52	·40	·40	·40	·39	·50	·40	·39	·40



**TABLE 2.**  
**New Cases and Deaths during 1940.**

Age Periods	New Cases				Deaths			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
0	4	1	1	2	2	..	3	1
1	2	3	17	12	..	2	10	7
5	12	2	25	22	..	1	4	5
10	7	14	15	15	1	4	2	..
15	70	75	19	23	29	35	4	6
20	48	88	9	18	18	38	1	6
25	113	103	16	15	74	70	6	3
35	117	54	10	8	98	51	3	2
45	125	31	9	8	92	26	5	5
55	76	22	7	3	75	16	1	3
65 and upwards	39	6	1	5	40	13	3	3
Totals ..	613	399	129	131	429	256	42	41

The number of non-notified deaths from pulmonary tuberculosis was  $20 = 2.9$  per cent.

The number of non-notified deaths from non-pulmonary tuberculosis was  $12 = 14.4$  per cent., but it is to be noted that 6 of the 12 cases were certified as cases of tubercular meningitis. These cases as a rule have a very short illness, and diagnosis is frequently in doubt during life.

The percentage of non-notified deaths from all forms of tuberculosis was  $4.16$ .

There were, in addition, 8 deaths of non-notified cases outside Manchester which were adjudged by the Registrar-General to be properly referable to this area.



TABLE 3.

Primary Notifications and Deaths from Pulmonary Tuberculosis, 1917—1940.

Age—Groups.

Pulmonary Tuberculosis	0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—	Total	
												Notifications	Deaths
Notifications, 1917—1930 Deaths, "	69 49	468 173	1213 125	1254 264	2205 1230	2406 1441	4226 2447	4111 2828	3368 2788	1689 1442	591 541	21600	13328
Notifications, 1931 Deaths, " "	1 3	10 4	75 6	63 10	143 67	191 111	263 195	209 151	191 166	113 109	26 33	1285	855
Notifications, 1932 Deaths, " "	1 2	24 17	32 2	28 10	146 52	158 114	234 151	194 136	172 167	74 91	24 28	1087	770
Notifications, 1933 Deaths, " "	3 2	11 4	17 3	27 7	125 68	170 105	253 159	176 161	188 146	85 95	26 23	1081	773
Notifications, 1934 Deaths, " "	.. 4	9 7	19 6	40 6	127 49	170 107	228 146	172 141	164 152	104 98	40 35	1073	751
Notifications, 1935 Deaths, " "	3 3	9 2	35 7	31 4	106 56	151 93	209 152	185 122	167 155	89 81	21 36	1006	711
Notifications, 1936 Deaths, " "	1 1	6 3	17 5	34 12	104 59	167 84	202 129	174 130	132 120	106 100	32 28	975	671
Notifications, 1937 Deaths, " "	2 1	12 6	28 2	21 2	130 58	149 77	219 126	180 128	150 114	117 100	47 50	1055	664
Notifications, 1938 Deaths, " "	6 1	8 3	27 2	30 7	116 46	146 78	192 128	152 95	134 126	104 104	32 30	947	620
Notifications, 1939 Deaths, " "	3 1	8 2	19 ..	22 4	125 53	132 73	174 131	169 98	116 100	101 101	41 35	910	598
Notifications, 1940 Deaths, " " " "	5 2	5 2	14 1	21 5	145 64	136 56	216 144	171 149	156 118	98 91	45 53	1012	685
Total Notifications Total Deaths	94 69	570 223	1496 159	1571 331	3472 1802	3976 2339	6416 3908	5893 4139	4938 4152	2680 2412	925 892	32031	20,426

TABLE 4.

## Primary Notifications and Deaths from Non-Pulmonary Tuberculosis, 1917—1940.

Age—Groups.

Non-pulmonary Tuberculosis	0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—	Total	
												Notifications	Deaths
Notifications, 1917—1930	235	1491	1695	1350	1025	575	610	378	282	178	106	7925	
Deaths, "	290	870	360	316	309	196	212	171	152	100	74		3050
Notifications, 1931 .. ..	10	83	95	87	67	40	55	22	23	6	8	496	
Deaths, " .. ..	10	43	11	9	16	2	16	9	5	6	5		132
Notifications, 1932 .. ..	6	69	86	49	55	33	45	30	18	8	3	402	
Deaths, " .. ..	7	38	20	10	12	7	10	4	8	5	5		126
Notifications, 1933 .. ..	6	46	70	41	33	33	35	27	13	8	1	313	
Deaths, " .. ..	7	26	13	6	18	7	13	11	7	3	3		114
Notifications, 1934 .. ..	7	52	64	43	37	30	39	21	11	6	3	313	
Deaths, " .. ..	9	24	15	11	14	14	15	12	6	3	2		125
Notifications, 1935 .. ..	3	45	56	45	31	27	49	23	13	9	6	307	
Deaths, " .. ..	3	18	9	6	8	12	8	14	8	8	1		95
Notifications, 1936 .. ..	4	50	57	49	38	33	29	13	14	11	3	301	
Deaths, " .. ..	7	21	15	9	14	12	8	4	10	7	2		109
Notifications, 1937 .. ..	9	53	67	43	66	36	45	26	8	14	9	376	
Deaths, " .. ..	5	23	10	10	12	11	13	9	6	13	7		119
Notifications, 1938 .. ..	10	41	51	47	42	27	39	18	15	6	7	303	
Deaths, " .. ..	8	17	13	10	8	7	12	7	12	4	7		105
Notifications, 1939 .. ..	4	46	40	34	46	29	36	23	15	10	6	289	
Deaths, " .. ..	3	24	9	7	14	12	9	6	5	8	6		103
Notifications, 1940 .. ..	3	29	47	30	42	27	31	18	17	10	6	260	
Deaths, " .. ..	4	17	9	2	10	7	9	5	10	4	6		83
Total Notifications .. ..	297	2005	2328	1818	1482	890	1013	599	429	266	158	11285	
Total Deaths .. ..	353	1121	484	396	435	287	325	252	229	161	118		4161

TABLE 5.

Primary Notifications of Pulmonary and Non-Pulmonary Tuberculosis  
received from Municipal Wards during 1940.

Wards	Pulmonary	Non-Pulmonary	Totals
1. Exchange .. ..	3	—	3
2. New Cross .. ..	49	6	55
3. St. Clement's .. ..	2	—	2
4. Oxford .. ..	4	—	4
5. St. John's .. ..	6	1	7
6. St. Ann's .. ..	—	—	—
7. St. Michael's .. ..	31	6	37
8. Collyhurst .. ..	18	3	21
9. Cheetham .. ..	38	8	46
10. Collegiate Church .. ..	27	3	30
11. Crumpsall .. ..	17	10	27
12. Blackley .. ..	38	23	61
13. Harpurhey .. ..	25	9	34
14. Moston .. ..	34	4	38
15. Newton Heath .. ..	23	6	29
16. Miles Platting .. ..	40	7	47
17. Bradford .. ..	44	5	49
18. Beswick .. ..	27	5	32
19. Ardwick .. ..	31	7	38
20. Openshaw .. ..	33	5	38
21. St. Mark's .. ..	31	7	38
22. Longsight .. ..	37	5	42
23. All Saints' .. ..	37	8	45
24. St. Luke's .. ..	40	6	46
25. Medlock Street .. ..	33	8	41
26. St. George's .. ..	35	9	44
27. Moss Side East .. ..	25	14	39
28. Moss Side West .. ..	20	5	25
29. Chorlton-cum-Hardy .. ..	42	20	62
30. Didsbury .. ..	18	11	29
31. Withington .. ..	41	17	58
32. Gorton North .. ..	26	4	30
33. Gorton South .. ..	36	9	45
34. Levenshulme .. ..	24	10	34
35. Rusholme .. ..	34	3	37
36. Wythenshawe .. ..	43	16	59
Total—City of Manchester..	1,012	260	1,272



**TABLE 6.**  
**Sources of Notification of Tuberculosis during 1940.**

Source	Pulmonary	Non-Pulmonary	Totals
Crumpsall Hospital .. ..	105	24	129
Withington Hospital .. ..	106	19	125
Booth Hall Hospital .. ..	30	31	61
District Medical Officers ..	—	—	—
Manchester Royal Infirmary	24	44	68
Ancoats Hospital .. ..	14	11	25
Skin Hospital .. ..	—	14	14
St. Mary's Hospital .. ..	2	7	9
Northern Hospital .. ..	3	8	11
Jewish Hospital .. ..	11	3	14
Pendlebury Hospital .. ..	—	6	6
Babies' Hospital .. ..	2	—	2
Hulme Dispensary .. ..	—	—	—
Gartside Street Dispensary..	2	9	11
Hardman Street Dispensary.	12	—	12
Asylums .. ..	15	1	16
Schools .. ..	—	3	3
Tuberculosis Staff .. ..	67	18	85
Naval and Military .. ..	45	4	49
Various Sources .. ..	74	24	98
Private Practitioners .. ..	496	31	527
Child Welfare Centres ..	—	—	—
Swinton House .. ..	—	—	—
Ear Hospital.. ..	—	—	—
Eye Hospital .. ..	—	—	—
Monsall Hospital .. ..	4	3	7
<b>Total .. ..</b>	<b>1,012</b>	<b>260</b>	<b>1,272</b>

191 tenants have allowed the removal of bedding, etc., for disinfection or destruction.

80,514 cardboard boxes have been prepared in the office and supplied to patients for use as sputum boxes in the home.

484 sputum bottles have been supplied for use outside the house.

12,611 visits have been made by the Enquiry Officers during the year.

40,463 letters were sent.

618 notices warning against spitting on floors, etc., have been supplied to offices and workshops.

TABLE 7.

Sources of Primary Notification of Non-Pulmonary Cases for the Years  
1918 to 1940.

Source	1918- 1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
Crumpsall Hospital .. .. .	274	20	19	10	15	8	16	41	20	19	24
Withington Hospital .. .. .	244	18	13	7	13	27	23	26	32	22	19
Booth Hall Hospital .. .. .	613	63	59	35	38	21	39	48	42	37	31
Outside District Medical Officers .. .. .	7	..	..	1	..	..	..	1	1	..	..
Royal Infirmary .. .. .	1155	92	78	59	55	77	51	58	38	49	44
Ancoats Hospital .. .. .	595	34	21	18	19	16	17	57	29	33	11
Skin Hospital .. .. .	519	33	28	24	18	16	11	13	8	20	14
St. Mary's Hospital .. .. .	153	10	..	1	7	9	6	6	7	3	7
Northern Hospital .. .. .	110	10	11	2	3	8	12	..	1	4	8
Jewish Hospital .. .. .	72	6	1	..	1	..	2	1	2	1	3
Pendlebury Hospital .. .. .	121	26	15	13	12	11	13	17	9	11	6
Babies' Hospital .. .. .	10	2	3	8	2	..	1	3	2	2	..
Hulme Dispensary .. .. .	4	..	..	..	..	1	..	..	..	1	..
Gartside Street Dispensary .. ..	515	15	20	9	9	5	12	8	12	5	9
Hardman Street Dispensary ..	216	9	1	..	..	..	..	..	..	..	..
Bowdon Hospital .. .. .	8	..	..	..	..	..	..	..	..	..	..
Asylums .. .. .	34	2	..	1	..	..	..	..	..	1	1
Schools .. .. .	251	23	27	24	16	5	3	3	4	2	3
Tuberculosis Office Staff .. ..	168	10	18	20	14	10	14	24	9	7	18
Naval and Military .. .. .	33	..	1	1	1	..	1	..	3	1	4
Various Sources .. .. .	220	16	16	11	16	15	14	14	19	20	24
Private Practitioners .. .. .	1798	96	70	69	74	76	64	53	61	47	31
Child Welfare Centres .. .. .	2	..	1	..	..	2	..	..	..	..	..
Ear Hospital .. .. .	..	..	..	..	..	..	1	..	..	..	..
Eye Hospital .. .. .	..	..	..	..	..	..	1	..	..	..	..
Swinton House .. .. .	..	11	..	..	..	..	..	..	..	..	..
Monsall Hospital .. .. .	..	..	..	..	..	..	..	3	4	4	3
	7122	496	402	313	313	307	301	376	303	289	260

TABLE 8.

Number of New Cases of Pulmonary Tuberculosis Notified during the Years  
1900 to 1940.

Year					Poor-law Cases	Institutions, etc.	Private Practitioners	Total
(1)	1900*	..	..	..	578	455	540	1,573
	1901	..	..	..	625	373	341	1,339
	1902	..	..	..	667	305	303	1,275
	1903	..	..	..	556	550	251	1,357
	1904	..	..	..	512	440	250	1,202
	1905	..	..	..	527	588	291	1,406
	1906	..	..	..	565	510	304	1,379
	1907	..	..	..	634	646	310	1,590
(2)	1908	..	..	..	659	498	346	1,503
	1909	..	..	..	681	542	384	1,607
	1910	..	..	..	543	760	356	1,659
(3)	1911	..	..	..	517	897	423	1,837
(4)	1912	..	..	..	488	947	969	2,404
(5)	1913	..	..	..	345	717	1,350	2,412
	1914	..	..	..	483	877	1,304	2,664
	1915	..	..	..	279	740	1,194	2,213
	1916	..	..	..	322	817	1,410	2,549
	1917	..	..	..	470	716	1,061	2,247
	1918	..	..	..	268	563	1,015	1,846
	1919	..	..	..	208	538	845	1,591
	1920	..	..	..	206	629	672	1,507
	1921	..	..	..	257	632	722	1,611
	1922	..	..	..	233	567	656	1,456
	1923	..	..	..	239	546	659	1,444
	1924	..	..	..	223	555	731	1,509
	1925	..	..	..	262	496	746	1,504
	1926	..	..	..	220	422	765	1,407
	1927	..	..	..	241	441	756	1,438
	1928	..	..	..	253	361	824	1,438
	1929	..	..	..	201	382	802	1,385
	1930	..	..	..	201	377	709	1,287
					<i>Transferred Hospitals</i>			
	1931	..	..	..	206	362	717	1,285
	1932	..	..	..	202	228	657	1,087
	1933	..	..	..	205	213	663	1,081
	1934	..	..	..	242	197	634	1,073
	1935	..	..	..	218	202	586	1,006
	1936	..	..	..	208	192	575	975
	1937	..	..	..	233	275	547	1,055
	1938	..	..	..	249	202	496	947
	1939	..	..	..	223	227	460	910
	1940	..	..	..	241	275	496	1,012
Total .. ..					14,690	20,260	27,120	62,070

\* This table does not include 425 cases notified in 1899.

(1). Voluntary notification of Pulmonary Tuberculosis—Manchester scheme.

(2). Compulsory notification (Tuberculosis Regulations) from Poor Law institutions.

(3). Compulsory notification from voluntary institutions.

(4). Compulsory notification of Pulmonary Tuberculosis by all practitioners.

(5). Compulsory notification of all forms of Tuberculosis.



TABLE 9.

Number of New Cases of Non-Pulmonary Tuberculosis Notified  
during the Years 1913—1940.

Year	Total		Total
	Males	Females	
1913 .. .. .	759	714	1,473
1914 .. .. .	519	413	932
1915 .. .. .	422	415	837
1916 .. .. .	418	467	885
1917 .. .. .	433	449	882
1918 .. .. .	345	353	698
1919 .. .. .	206	228	434
1920 .. .. .	280	257	537
1921 .. .. .	295	281	576
1922 .. .. .	321	284	605
1923 .. .. .	350	380	730
1924 .. .. .	316	307	623
1925 .. .. .	322	300	622
1926 .. .. .	239	224	463
1927 .. .. .	277	226	503
1928 .. .. .	214	276	490
1929 .. .. .	204	171	375
1930 .. .. .	251	215	466
1931 .. .. .	259	237	496
1932 .. .. .	201	201	402
1933 .. .. .	154	159	313
1934 .. .. .	170	143	313
1935 .. .. .	146	161	307
1936 .. .. .	154	147	301
1937 .. .. .	184	192	376
1938 .. .. .	154	149	303
1939 .. .. .	143	146	289
1940 .. .. .	129	131	260
Total .. ..	7,865	7,626	15,491

TABLE 10.

Tuberculosis (Non-Pulmonary).—Primary Cases Notified during 1940.—Age Groups and Site.

Location of Disease	AGE GROUPS														Totals							
	0—		5—		10—		15—		20—		25—		35—				45—		55—		65—	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females		
Brain :—Tumour	8	5	2	7	..	1	..	1	1	3	1	..	1	..	1	..	..	..	11	1		
Meninges	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Hydrocephalus	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Glands :—Cervical	3	3	11	10	9	6	1	3	3	9	4	2	1	1	..	1	1	..	33	37		
Mesenteric	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5		
Axillary	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..		
Inguinal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Tuberculous Peritonitis	..	..	1	..	1	1	1	2	1	3	..	..	..	..	1	1	1	..	6	8		
Tuberculosis of Abdomen	1	..	2	..	..	..	1	2	..	..	..	..	..	1	..	..	..	4	4			
" of Breast	..	..	..	..	1	..	..	..	..	..	1	..	..	..	1	..	..	..	3	1		
" of Intestines	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Joints:—Spine	1	3	2	1	..	2	3	2	..	1	2	2	2	1	..	1	1	2	9	14		
Hip	2	..	2	3	..	1	1	..	1	3	2	1	1	2	1	1	1	12	8			
Elbow	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	3	2		
Ankle	..	..	1	..	..	..	2	1	..	..	..	..	..	..	1	..	..	1	5	1		
Wrist	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	2	1		
Shoulder	1	..	..	..	1	1	4	..	2	..	1	..	..	..	1	1	1	..	9	3		
Knee	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	1	..	1	5		
Bones :—Various	..	3	..	..	..	..	1	..	..	..	..	..	..	..	1	1	1	..	1	7		
Tuberculosis of Skin	..	..	1	1	1	1	2	..	2	..	2	2	..	2	..	..	1	..	8	7		
General Tuberculosis	1	..	1	..	1	..	..	..	..	..	..	..	..	1	..	..	..	3	3	2		
Special Organs :—Ear	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..		
Bladder, etc.	..	..	..	..	..	..	..	..	..	1	..	..	2	..	..	..	..	..	2	1		
Kidney	..	..	..	..	..	1	..	..	1	1	2	1	1	..	1	1	..	5	5	2		
Testicle, etc.	..	..	..	..	..	..	..	..	4	..	..	..	..	..	3	..	..	8	8	..		
Muscles, etc.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..		
Rectum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Uterus	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Unclassified	1	..	2	..	..	2	1	2	..	2	1	1	1	..	..	1	1	..	7	6		
Totals	18	14	25	22	15	15	19	23	9	18	16	15	10	8	9	8	7	3	1	5	129	131

TABLE 11.  
Various Statistics Relating to the Notification of Tuberculosis.

	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931	1930	1929	1928	1927	1914 to 1926	1899 Sept. 1st to 1913 Dec. 31st	Total
<b>Cases Visited and Registered—</b>																	
Males .. .. .	771	674	716	818	703	738	836	804	828	975	1014	1058	1106	1173	19688	14170	46072
Females .. .. .	541	544	561	630	586	584	598	622	723	806	806	809	919	866	15008	8854	33457
Totals .. .. .	1312	1218	1277	1448	1289	1322	1434	1426	1551	1781	1820	1867	2025	2039	34696	23024	79529
<b>Houses Disinfected—</b>																	
<b>1. By Corporation—</b>																	
(a) With solution of chlorinated lime only .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15582	9015	24597
(b) With lime solution only .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	126	126
(c) By Esmarch's method and solution of chlorinated lime .. .. .	1837	1983	2107	2180	2361	2608	2866	2952	2991	3224	3115	2934	2693	2083	12643	17232	29875
(d) † By fumigating lamp .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1763	..	37697
Totals .. .. .	1837	1983	2107	2180	2361	2608	2866	2952	2991	3224	3115	2934	2693	2083	29988	26373	92295
<b>2. By Tenants—</b>																	
Esmarch's method of chlorinated lime, etc. .. .. .	4170	4283	4473	4583	4864	5108	5614	5791	5802	6342	7032	7192	6868	7338	64473	36919	180852
Totals .. .. .	6007	6266	6580	6763	7225	7716	8480	8743	8793	9566	10147	10126	9561	9421	94461	63292	273147
<b>Specimens of Sputum examined—</b>																	
Positive .. .. .	649	693	649	683	769	846	1002	966	649	408	360	392	360	348	6845	6705	22324
Negative .. .. .	3581	3511	3878	4060	4202	4809	4957	4734	3589	2236	2039	1698	1548	1573	20669	12176	79260
Totals .. .. .	4230	4204	4527	4743	4971	5655	5959	5700	4238	2644	2399	2090	1908	1921	27514	18881	101584
<b>Cases admitted to Hospital and Sanatoria .. .. .</b>																	
Notified from Common Lodging Houses	2157	2007	2204	2246	2239	2347	2368	2275	2038	2275	2033	1919	1948	2062	27499	22669	80286
Number of cases under observation ..	39	25	37	27	36	24	28	43	44	45	62	71	62	56	1582	3109	5290
	6736	7034	7140	7558	7951	8271	8650	9017	9441	9759	10060	10197	10494	10586	105108	33702 approx.	..

† Method commenced on 1st December, 1925.



TABLE 12.

Return showing the Work of the Clinic during the Year 1940.

Diagnosis	Pulmonary			Non-Pulmonary			Total			Grand Total	
	Adults		Children	Adults		Children	Adults		Children		
	M.	F.	M.	F.	M.	F.	M.	F.	M.		F.
A.—New cases examined during the year (excluding contacts)—											
(a) Definitely tuberculous .. .. .	469	299	15	12	54	65	38	34	523	364	986
(b) Diagnosis not completed .. .. .	..	..	..	..	..	..	..	..	55	44	118
(c) Non-tuberculous .. .. .	..	..	..	..	..	..	..	..	674	365	1178
B.—Contacts examined during the year—											
(a) Definitely tuberculous .. .. .	13	14	3	5	2	1	..	..	15	15	38
(b) Diagnosis not completed .. .. .	..	..	..	..	..	..	..	..	6	15	39
(c) Non-tuberculous .. .. .	..	..	..	..	..	..	..	..	227	436	1327
C.—Cases written off the Dispensary Register as—											
(a) Recovered .. .. .	81	63	29	18	28	36	55	34	109	99	344
(b) Non-tuberculous .. .. .	..	..	..	..	..	..	..	..	901	801	2505
D.—Number of persons on Dispensary Register on December 31st—											
(a) Definitely tuberculous .. .. .	1731	1457	181	172	282	413	309	271	2013	1870	4816
(b) Diagnosis not completed .. .. .	..	..	..	..	..	..	..	..	61	59	157

Total number of cases of Tuberculosis who received Treatment from the Clinic .. .. . 540

Total number of attendances at the Clinic .. .. . 18,168

TABLE 13—Insured Cases Applying for Treatment for the Years 1914—1940.

	Males	Females	Total
1914 .. .. .	730	321	1,051
1915 .. .. .	572	315	887
1916 .. .. .	747	316	1,063
1917 .. .. .	728	359	1,087
1918 .. .. .	642	261	903
1919 .. .. .	630	255	885
1920 .. .. .	645	250	895
1921 .. .. .	615	255	870
1922 .. .. .	543	265	808
1923 .. .. .	539	291	830
1924 .. .. .	597	371	968
1925 .. .. .	610	327	937
1926 .. .. .	562	368	930
1927 .. .. .	555	296	851
1928 .. .. .	612	372	984
1929 .. .. .	610	376	986
1930 .. .. .	551	352	903
1931 .. .. .	555	360	915
1932 .. .. .	451	323	774
1933 .. .. .	503	281	784
1934 .. .. .	471	284	755
1935 .. .. .	428	283	711
1936 .. .. .	483	312	795
1937 .. .. .	507	345	852
1938 .. .. .	466	269	735
1939 .. .. .	413	306	719
1940 .. .. .	493	317	810

Cases of discharged soldiers referred for treatment—231.

Sanatorium and hospital care has been provided for 43 cases of ex-service men discharged during the present war.

Number of patients who had so far recovered that no signs of active disease were found : Insured—194 ; Uninsured—161.

Grants of food were made in 1,677 instances to 299 families, and 5 grants of clothing were supplied to 4 patients in hospital and sanatoria to enable them to derive full benefit from treatment.

12,052 special visits have been paid by the tuberculosis nurses and 404 visits by the clinical nurse who attends to domiciliary patients requiring surgical dressings and nursing care.

TABLE 14.—Insured Cases Treated in 1940.

Residential .. .. .	1,657
Tuberculosis Clinic .. .. .	59
Domiciliary .. .. .	1,909
Total .. .. .	<u>3,625</u>

## Analysis of Cases Treated.

TABLE 15.—Residential (Insured).

INSTITUTION	Total Cases Treated		Discharged from Institutions		Died	† Residential Treatment discontinued in other cases	Still under Residential Treatment on 1st Jan., 1941
	Males	Females	Improved	Without Improvement			
	(1)		(2)	(3)	(4)	(5)	(6)
Bag uley .. .. .	367	194	118 63	31 17	51 26	20 5	147 83
Crossley .. .. .	57	103	26 36	3 3	3 5	3 9	22 50
Abergele .. .. .	72	13	27 5	5 1	3 ..	2 ..	35 7
Barrowmore .. .. .	50	..	19 ..	8 ..	4 ..	19 ..	.. ..
Withington .. .. .	392	193	189 105	44 33	111 36	.. ..	48 19
Crumpsall .. .. .	52	18	5 3	35 13	12 2	.. ..	.. ..
Total Pulmonary .. .	990	521	596	193	253	58	411
NON-PULMONARY							
Barrowmore .. .. .	1	..	..	..	..	1	..
Manchester Royal Infirmary ..	10	9	9 9	.. ..	1 ..	.. ..	.. ..
Skin Hospital .. .. .	2	..	2 ..	.. ..	.. ..	.. ..	.. ..
Ancoats Hospital .. .. .	2	..	2 ..	.. ..	.. ..	.. ..	.. ..
Shropshire Orthopaedic Hospital	26	17	15 9	.. ..	1 1	.. ..	10 7
Withington .. .. .	21	21	13 11	2 4	6 3	.. ..	.. 3
Crumpsall .. .. .	18	19	9 10	6 4	2 2	.. ..	1 3
Total Non-Pulmonary ..	80	66	43	62	16	1	24
TOTAL—ALL FORMS .. .. .	1070	587	639	255	269	59	435

† The figures in column (5) relate to cases of which no definite report is available for various reasons—e.g., the withdrawal from the Institution of the insured persons themselves before the expiration of the period for which they were nominated for the treatment.



TABLE 16.—*Residential (Uninsured and Children under 15).*

INSTITUTION	Total Cases Treated			Discharged from Institutions		Died	† Residential Treatment discontinued in other cases	Still under Residential Treatment on 1st Jan., 1941
	Males	Females	Children	Improved	Without Improvement			
		(1)		(2)	(3)	(4)	(5)	(6)
PULMONARY								
Baguley .. .. .	63	72		24 25	5 7	15 12	2 6	17 22
Crossley .. .. .	7	26		3 12	..	1 1	1 3	2 10
Abergele .. .. .	6	2	115	3 34	..	1 7	1 3	1 70
Barrowmore .. ..	11	..	..	5 ..	1 ..	2 ..	3 ..	.. ..
Withington .. ..	185	198	..	69 94	29 22	57 54	..	30 28
Booth Hall .. ..	..	..	60	..	..	..	..	..
Crumpsall .. .. .	44	12	..	2 ..	30 8	11 3	..	1 1
Total Pulmonary	316	310	175	300	111	176	23	191
NON-PULMONARY								
Abergele .. .. .	..	..	130	..	..	..	..	..
Manchester Royal Infirmary .. ..	1	4	1	1 4 1	..	..	..	..
Skin Hospital .. ..	..	2	..	..	..	..	..	..
Ancoats Hospital ..	..	..	..	..	..	..	..	..
Shropshire Orthopaedic Hospital .. .. .	4	5	..	1 3	..	..	..	3 2
Withington .. .. .	7	15	..	3 5	2 5	2 4	..	.. 1
Booth Hall .. .. .	..	..	52	..	..	..	..	..
Crumpsall .. .. .	8	11	..	3 7	2 1	3 3	..	..
Total Non-Pulmonary .. ..	20	37	183	76	22	26	7	109
TOTAL—ALL FORMS ..	336	347	358	376	133	202	30	300

† The figures in column (5) relate to cases of which no definite report is available for various reasons—e.g., the withdrawal from the Institution of the persons themselves before the expiration of the period for which they were nominated for the treatment.

## Light Therapy.

Artificial light treatment has been continued for those cases that experience has proved benefit by this form of therapy. During the last eleven years 552 cases have been under this treatment. Two forms of artificial sunlight are made use of, viz., the mercury vapour lamp (which was in use up to the time the department moved into the new clinic) and the open arc lamp.

The following table analyses these cases in detail and shows a gain in weight and improvement in many patients. Quiescence was secured in a number of those who completed the necessary course of treatment. It is to be noted that those particularly benefiting are the sufferers from tuberculous adenitis (with or without abscess formation), and those in whom abdominal tuberculosis existed. It must be borne in mind that no figures of the treatment of lupus appear, as these cases are treated by the Manchester and Salford Hospital for Skin Diseases (on behalf of the Corporation) by light therapy, and in the majority of instances with very marked benefit :—

TABLE 17.

[illegible]

The following table summarises the non-pulmonary cases treated at various Institutions :—

TABLE 18.

Tuberculosis of :—

Bones and Joints	..	..	..	..	..	..	..	..	..	227
Glands	..	..	..	..	..	..	..	..	..	55
Genito Urinary Tract	..	..	..	..	..	..	..	..	..	19
Abdomen	..	..	..	..	..	..	..	..	..	44
Skin—										
1. Lupus Vulgaris	..	..	..	..	..	..	..	..	..	81
2. Toxi Tuberculids	..	..	..	..	..	..	..	..	..	4
3. Bazins Disease	..	..	..	..	..	..	..	..	..	1
4. Tuberculous Ulceration of Skin	..	..	..	..	..	..	..	..	..	2

TABLE 19.

Tables showing After History of Quiescent and Arrested Cases (Insured).  
1930.

*No Tubercle Bacilli found.* *Tubercle Bacilli found.*

Stage	Sex	Number of cases marked off as Quiescent	Number known to be still living at end of 1940	Lost sight of	Died	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1940	Lost sight of	Died
I.	M	81	29	34	18	M	24	8	9	7
	F	44	15	25	4	F	4	2	2	..
II.	M	44	17	14	13	M	24	7	6	11
	F	21	9	11	1	F	14	7	4	3
III.	M	15	5	4	6	M	4	3	1	..
	F	7	1	4	2	F	2	..	1	1
	M & F	212	76	92	44	M & F	72	27	23	22



## Tables showing After History of Quiescent and Arrested Cases (Insured)—continued.

1931.

*No Tubercle Bacilli found.**Tubercle Bacilli found.*

Stage	Sex	Number of cases marked off as Quiescent	Number known to be still living at end of 1940	Lost sight of	Died	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1940	Lost sight of	Died
I.	M	78	30	24	24	M	25	16	8	1
	F	57	24	23	10	F	5	1	4	..
II.	M	48	18	17	13	M	29	8	8	13
	F	14	7	5	2	F	7	3	3	1
III.	M	9	4	3	2	M	5	3	..	2
	F	2	1	..	1	F	1	..	..	1
	M & F	208	84	72	52	M & F	72	31	23	18

1932.

I.	M	46	14	22	10	M	21	7	11	3
	F	53	16	27	10	F	16	6	8	2
II.	M	30	8	18	4	M	15	8	4	3
	F	22	11	9	2	F	9	4	4	1
III.	M	9	2	4	3	M	2	1	1	..
	F	4	..	2	2	F	3	1	..	2
	M & F	164	51	82	31	M & F	66	27	28	11

1933.

I.	M	35	15	10	10	M	10	5	2	3
	F	23	9	12	2	F	5	2	2	1
II.	M	22	4	13	5	M	15	9	1	5
	F	15	3	8	4	F	5	1	3	1
III.	M	4	2	..	1	M	4	2	1	1
	F	2	3	..	..	F	..	..	..	..
	M & F	101	36	43	22	M & F	39	19	9	11

## Tables showing After History of Quiescent and Arrested Cases (Insured)—continued.

1934.

*No Tubercle Bacilli found.**Tubercle Bacilli found.*

Stage	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1940	Lost sight of	Died	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1940	Lost sight of	Died
I.	M	35	14	17	4	M	14	9	5	..
	F	28	16	12	..	F	3	1	1	1
II.	M	14	12	2	..	M	9	6	2	1
	F	18	11	5	2	F	3	2	..	1
III.	M	..	..	..	..	M	2	1	1	..
	F	1	1	..	..	F	..	..	..	..
	M & F	96	54	36	6	M & F	31	19	9	3

1935.

I.	M	57	31	18	8	M	20	10	6	4
	F	52	36	13	3	F	13	9	3	1
II.	M	39	25	11	3	M	22	15	2	5
	F	22	12	7	3	F	8	6	2	..
III.	M	1	1	..	..	M	4	2	1	1
	F	3	3	..	..	F	3	3	..	..
	M & F	174	108	49	17	M & F	70	45	14	11

1936.

I.	M	53	32	18	3	M	27	25	2	..
	F	51	33	14	4	F	19	15	4	..
II.	M	15	10	4	1	M	29	20	5	4
	F	25	17	6	2	F	11	9	2	..
III.	M	6	3	1	2	M	8	6	..	2
	F	4	2	..	2	F	2	2	..	..
	M & F	154	97	43	14	M & F	96	77	13	6

## Tables showing After History of Quiescent and Arrested Cases (Insured)—continued.

1937.

*No Tubercle Bacilli found.**Tubercle Bacilli found.*

Stage	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1940	Lost sight of	Died	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1940	Lost sight of	Died
I.	M	40	26	12	2	M	20	13	7	..
	F	33	26	6	1	F	8	6	1	1
II.	M	20	10	9	1	M	25	19	3	3
	F	18	11	6	1	F	17	13	3	1
III.	M	2	1	..	1	M	4	2	1	1
	F	2	1	1	..	F	4	3	..	1
	M & F	115	75	34	6	M & F	78	56	15	7

1938.

I.	M	34	25	9	..	M	9	9	..	..
	F	30	22	6	2	F	13	10	2	1
II.	M	26	18	6	2	M	33	27	5	1
	F	17	14	2	1	F	11	10	1	..
III.	M	3	2	1	..	M	..	..	..	..
	F	1	1	..	..	F	1	1	..	..
	M & F	111	82	24	5	M & F	67	57	8	2

1939.

I.	M	19	13	4	2	M	4	2	2	..
	F	15	11	2	2	F	7	7	..	..
II.	M	22	17	3	2	M	26	22	2	2
	F	18	16	1	1	F	10	10	..	..
III.	M	1	1	..	..	M	2	2	..	..
	F	3	2	..	1	F	2	2	..	..
	M & F	78	60	10	8	M & F	51	45	4	2



### Abergele, Baguley, and Crossley Sanatoria.

Conditions relative to patients treated in the above sanatoria during the last ten years are set forth in the following tables.

#### TABLE 20.

#### Abergele Sanatorium. *Adult Males—Pulmonary.*

Year	No. of new cases	Position at the end of 1940				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	These are additional to the cases in Column 2 and are given to show the number of beds occupied
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1931 ..	84	27	3	38	16	18
1932 ..	68	23	1	28	16	16
1933 ..	61	25	2	18	16	18
1934 ..	54	18	5	18	13	12
1935 ..	37	17	2	6	12	16
1936 ..	40	21	4	7	8	9
1937 ..	26	15	2	1	8	12
1938 ..	26	15	2	2	7	9
1939 ..	42	30	4	2	6	9
1940 ..	44	42	1	..	1	..
Total ..	482	233	26	120	103	119

#### *Adult Females—Pulmonary.*

Year	No. of new cases	Position at the end of 1940				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	These are additional to the cases in Column 2 and are given to show the number of beds occupied
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1931 ..	16	4	..	7	5	1
1932 ..	11	3	1	3	4	2
1933 ..	10	4	..	5	1	5
1934 ..	9	6	..	2	1	1
1935 ..	11	7	1	3	..	1
1936 ..	10	5	..	3	2	..
1937 ..	11	8	..	3	..	2
1938 ..	10	7	..	1	2	1
1939 ..	11	10	1	..	..	..
1940 ..	5	5	..	..	..	..
Total ..	104	59	3	27	15	13

TABLE 20—continued.

## Abergele Sanatorium.

*Child Males—Pulmonary.*

Year	No. of new cases	Position at the end of 1940				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1931 ..	23	12	1	3	7	..
1932 ..	20	15	..	1	4	..
1933 ..	28	15	..	..	13	..
1934 ..	16	11	..	3	2	..
1935 ..	21	12	2	..	7	1
1936 ..	16	11	..	1	4	1
1937 ..	19	15	..	..	4	3
1938 ..	20	14	..	..	6	1
1939 ..	26	22	1	..	3	2
1940 ..	19	19	..	..	..	2
Total ..	208	146	4	8	50	10

*Child Females—Pulmonary.*

Year	No. of new cases	Position at the end of 1940				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1931 ..	24	7	1	5	11	..
1932 ..	20	9	3	1	7	1
1933 ..	23	10	4	3	6	..
1934 ..	16	10	1	2	3	2
1935 ..	22	12	2	2	6	1
1936 ..	24	11	5	1	7	2
1937 ..	22	16	4	..	2	..
1938 ..	17	11	1	..	5	..
1939 ..	14	11	2	..	1	1
1940 ..	20	16	4	..	..	..
Total ..	202	113	27	14	48	7

TABLE 20—continued.

## Abergele Sanatorium.

*Child Males—Non-Pulmonary.*

Year	No. of new cases	Position at the end of 1940				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	These are additional to the cases in Column 2 and are given to show the number of beds occupied
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1931 ..	24	14	1	1	8	2
1932 ..	60	36	4	1	19	1
1933 ..	23	17	1	..	5	..
1934 ..	29	19	1	1	8	1
1935 ..	24	16	2	1	5	..
1936 ..	31	23	..	..	8	..
1937 ..	24	19	..	..	5	1
1938 ..	27	22	..	..	5	3
1939 ..	24	23	1	..	..	3
1940 ..	14	14	..	..	..	3
Total ..	280	203	10	4	63	14

*Child Females—Non-pulmonary.*

Year	No. of new cases	Position at the end of 1940				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	These are additional to the cases in Column 2 and are given to show the number of beds occupied
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1931 ..	24	19	..	2	3	..
1932 ..	36	25	2	1	8	..
1933 ..	20	13	..	2	5	..
1934 ..	15	11	..	..	4	1
1935 ..	16	10	..	1	5	1
1936 ..	28	17	3	1	7	1
1937 ..	24	20	2	..	2	..
1938 ..	14	12	1	..	1	3
1939 ..	13	13	..	..	..	2
1940 ..	11	11	..	..	..	..
Total ..	201	151	8	7	35	8



**TABLE 21.**  
**Baguley Sanatorium.**

*Males.*

Year	No. of new cases	Position at the end of 1940				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1931 ..	264	67	90	88	19	87
1932 ..	263	60	85	94	24	81
1933 ..	285	82	82	106	15	67
1934 ..	297	85	97	97	18	96
1935 ..	250	68	59	92	31	118
1936 ..	235	90	56	68	21	89
1937 ..	264	116	47	71	30	91
1938 ..	188	86	32	49	21	76
1939 ..	186	100	45	29	12	93
1940 ..	213	173	29	10	1	93
Total ..	2445	927	622	704	192	891

*Females.*

Year	No. of new cases	Position at the end of 1940				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1931 ..	146	32	53	53	8	28
1932 ..	157	38	54	50	15	21
1933 ..	162	54	46	55	7	33
1934 ..	184	68	41	60	15	56
1935 ..	177	70	32	61	14	31
1936 ..	144	56	33	46	9	39
1937 ..	148	68	39	33	8	27
1938 ..	148	69	20	37	22	41
1939 ..	131	75	27	17	12	48
1940 ..	133	111	14	7	1	37
Total ..	1530	641	359	419	111	361

**TABLE 22.**  
**Crossley Sanatorium.**  
*Males.*

Year	No. of new cases	Position at the end of 1940				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1931 ..	84	32	..	34	18	23
1932 ..	38	13	..	15	10	26
1933 ..	52	18	1	28	5	22
1934 ..	43	19	..	14	10	12
1935 ..	72	35	2	16	19	14
1936 ..	38	20	..	10	8	15
1937 ..	35	18	2	8	7	11
1938 ..	48	29	1	8	10	8
1939 ..	39	35	1	3	..	11
1940 ..	36	34	1	..	1	8
Total ..	485	253	8	136	88	150

*Females.*

Year	No. of new cases	Position at end of 1940				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1931 ..	136	62	1	50	23	49
1932 ..	135	65	1	45	24	54
1933 ..	130	45	3	46	36	37
1934 ..	95	56	2	27	10	32
1935 ..	98	47	2	25	24	32
1936 ..	92	53	1	27	11	30
1937 ..	85	52	1	17	15	23
1938 ..	61	39	3	11	8	23
1939 ..	66	54	1	4	7	28
1940 ..	65	62	..	..	3	21
Total ..	963	535	15	252	161	329

ABERGELE SANATORIUM.

At the commencement of the year there were 220 patients in the sanatorium :—  
44 in the adults' section and  
176 in the children's section.

At the end of the year there were 211 patients in the sanatorium :—  
45 in the adults' section and  
166 in the children's section.

General Classification of Cases Treated.

Classification on Admission	In Residence on 1st Jan., 1940		Admitted		Discharged		Died		In Residence on 1st Jan., 1941	
	Adults	Children	Adults	Children	Adults	Children	Adults	Children	Adults	Children
<i>Pulmonary Group—</i>										
T.B. Minus .. .. .	14	55	14	29	18	31	..	2	10	51
T.B. Plus Group 1 .. .	2	..	3	1	3	..	..	..	2	1
T.B. Plus Group 2 .. .	27	15	31	8	23	5	4	1	31	17
T.B. Plus Group 3 .. .	1	1	1	4	..	..	..	4	2	1
<i>Non-Pulmonary Group—</i>										
Bones and Joints .. .	..	77	..	14	..	16	..	2	..	73
Abdominal .. .. .	..	10	..	9	..	7	..	..	..	12
Other Organs .. .. .	..	1	..	..	..	1	..	..	..	..
Peripheral Glands .. .	..	17	..	1	..	8	..	..	..	10
Totals .. .. .	44	176	49	66	44	68	4	9	45	165
Observation—										
Pulmonary Group .. .	..	..	..	*3	..	*2	..	..	..	1
Non-pulmonary Group ..	..	..	..	1	..	1	..	..	..	..

TOTAL PATIENTS TREATED—  
Adults' section of the sanatorium .. .. . 93  
Children's section of the sanatorium .. .. . 246  
\* One of the four cases admitted for observation was ultimately diagnosed as tuberculous and is included as an admission in the Pulmonary Group of this table.



### Adults' Section of the Sanatorium.

In residence on 1st January, 1940	.. .. .	44
Admitted	.. .. .	49
Discharged	.. .. .	44
Died	.. .. .	4
In residence on 1st January, 1941	.. .. .	45

The more important aspects of general and special treatment have been reviewed in previous reports.

### Results of Treatment.

#### *Patients Discharged as "Quiescent" or "Improved."*

The duration of treatment depends on the response of the individual patient. On discharge it is desired that the general condition of the patient should be satisfactory, that the temperature and pulse records should be within normal limits, and that the clinical signs and the result of radiological and other ancillary examinations denote inactive disease. In 35 or 77.8 per cent. of the patients discharged during the year, these postulates have been attained.

### Children's Section of the Sanatorium.

In residence on 1st January, 1940	.. .. .	176
Admitted	.. .. .	70
Discharged	.. .. .	71
Died	.. .. .	9
In residence on 1st January, 1941	.. .. .	166

### Treatment.

This has followed the same lines as in previous years—both in local and general treatment.

188 splints were made during the year for application to and treatment of the children and 505 radiograms taken for diagnosis and observation of the results of treatment. 20 surgical operations were performed. 794 examinations were made in the pathological laboratory.

### School.

#### *General Statistics.*

Number on school register, 1st January, 1940	.. .. .	168
Admitted during 1940	.. .. .	69
Discharged during 1940	.. .. .	61
Number on school register 31st December, 1940	.. .. .	176

BAGULEY SANATORIUM.

The number of available beds was (average) 290.

The number of patients admitted was 490, the daily average number of beds occupied being 276.

Table giving the number of admissions, discharges, etc., compared with the previous four years :—

	1936	1937	1938	1939	1940
Number of patients—					
In hospital, 1st January .. .. .	320	318	329	317	224
Admitted during the year .. .. .	511	540	460	509	490
Discharged during the year .. .. .	404	422	387	522	327
Died during the year .. .. .	109	107	85	80	108
Total treated during the year .. .. .	831	858	789	826	714
Remaining in hospital, 31st December .. ..	318	329	317	224	279
Daily average number of beds occupied .. ..	330.92	329.64	329.22	326	276
Average length of stay of patients discharged—					
Males.. .. . (days)	178.66	187.01	228.79	185.66	145.05
Females .. .. . „	219.4	245.37	270.62	238.5	159.72
Average length of time in hospital of fatal cases—					
Males.. .. . (days)	282.88	289.44	305.98	126	146.49
Females .. .. . „	374.19	338.78	266.88	303.84	135
Case mortality .. .. .	13.12	12.7	10.77	9.60	15.13

Cases admitted from the districts of the North Cheshire Joint Hospital Board are included in all totals given in this report. The details of such cases are :—

On January 1st there were four patients in the sanatorium ; thirteen were admitted during the period, three patients were discharged and four died ; ten patients remained in the hospital on December 31st.

Pathological Laboratory Report :—

Specimens of sputum examined .. .. .	2,512
Specimens found to be positive .. .. .	1,419
Specimens found to be negative .. .. .	1,093

Special Concentration Tests—

Specimens of sputum examined .. .. .	69
Specimens found to be positive .. .. .	11
Specimens found to be negative .. .. .	58

Other examinations :—	Number	Result	
		Positive	Negative
Special examination of urine .. .. .	6	3	3
Pleural effusion .. .. .	14	4	10
Pus .. .. .	7	4	3

A large number of special examinations were carried out by the Public Health Laboratory.

*Blood Sedimentations.*

This test still proves to be of great value and the number carried out was 1,325.

*X-Ray Report :—*

Patients screened	.. .. .	1,350
Skiagrams taken	.. .. .	648

*Dental Report :—*

Attendances	.. .. .	560
Extractions	.. .. .	296
Fillings	.. .. .	86
Scraping and cleaning	.. .. .	17
Dentures	.. .. .	14
Repairs and adjustments to dentures	.. .. .	18

*Summary of Immediate Results of Treatment.*

Classification	Condition on Discharge				Died
	Quiescent	Improved	Stationary	Worse	
Class T.B. Minus .. ..	11	47	8	1	3
„ T.B. Plus, Group I.	..	4	1	..	..
„ T.B. Plus, Group II.	8	127	30	7	29
„ T.B. Plus, Group III.	1	36	12	10	76
Totals .. ..	20	214	51	18	108

**AMBULANCE AND DISINFECTING STATION.**

The station is open day and night for the removal of infectious disease cases and for the collection and disinfection of infected bedding.

*Ambulances :—*

There is a fleet of seven ambulances in use for the removal of infectious disease cases, including tuberculosis. During the year under review the number of cases removed to hospital was 3,978. The mileage covered was 55,254.



### CLEANSING STATION.

The cleansing station at Monsall Road, Newton Heath, is used for the treatment of scabies, cleansing of persons from the clearance areas and verminous persons.

The following table shows the number of cases treated during the year :—

Month	Scabies (treatments)	Voluntary cleansings	Compulsory cleansings	Dis- infestation	Special cases	Totals
January .. ..	189	13	—	50	—	252
February .. ..	327	6	—	42	—	375
March .. .. .	397	6	—	67	—	470
April .. .. .	528	16	—	75	1	620
May .. .. .	555	15	2	60	1	633
June .. .. .	393	69	2	37	—	501
July .. .. .	404	33	6	63	—	506
August .. ..	527	19	16	24	—	586
September ..	588	16	14	33	—	651
October .. ..	816	8	45	4	—	873
November .. ..	711	14	15	9	—	749
December .. ..	658	16	4	—	—	678
Totals .. ..	6093	231	104	464	2	6894

#### *Disinfection.*

Three motor bedding vans are used for the removal of infected bedding, clothing, etc., and 73,565 articles were removed. The mileage covered by the bedding vans was 32,545.

### VENEREAL DISEASES SCHEME.

The treatment of Venereal Diseases was carried out, as in past years, at the several special clinics at voluntary hospitals, at two of the maternity centres, and in the special wards set apart at Crumpsall Hospital. The preventive treatment clinic at St. Luke's Hospital has been extensively used and clearly meets a public need.

## Summary of Work Done at all the Centres during 1940.

	Syphilis		Soft Chancre		Gonorrhœa		Conditions other than Venereal		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Totals
Number of cases on 1st January, 1940, under treatment or observation . . . . .	705	587	..	..	559	229	231	127	1495	943	2438
Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection . . . . .	51	48	..	..	22	20	..	9	73	77	150
Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from . . . . .	383	258	8	..	956	247	858	590	2205	1095	3300
Number of cases dealt with for the first time during the year under report known to have received treatment at other Centres for the same infection, or to have been under observation at other Centres . . . . .	58	28	..	..	32	54	2	1	92	83	175
Totals of Items 1, 2, 3, and 4	1197	921	8	..	1569	550	1091	727	3865	2198	6063
Number of cases discharged after completion of treatment and final tests of cure . . . . .	124	74	2	..	604	137	961	569	1691	780	2471
Number of cases which ceased to attend before completion of treatment and were, on first attendance, suffering from . . . . .	253	227	2	..	322	139	..	..	577	366	943
Number of cases which ceased to attend after completion of treatment but before final tests of cure . . . . .	99	50	..	..	197	31	..	..	296	81	377
Number of cases transferred to other centres or to institutions, or to care of private practitioners . . . . .	161	51	..	..	182	43	..	..	343	94	437
Number of cases remaining under treatment or observation on 31st December, 1940 . . . . .	560	519	4	..	264	200	130	158	958	877	1835
Totals of Items 5, 6, 7, 8, and 9 . . . . .	1197	921	8	..	1569	550	1091	727	3865	2198	6063
These Totals should agree with those of Items 1, 2, 3, and 4).											
Number of cases included in Item 6 which failed to complete one course of treatment . . . . .	70	46	..	..	..	..	..	..	70	46	116
Number of attendances :—											
(a) for individual attention of the medical officers . . . . .	15295	11908	57	..	8294	4374	2661	1823	26307	18105	44412
(b) for intermediate treatment, e.g., irrigation, dressing . . . . .	1604	..	1962	..	24578	6470	..	32	28144	6502	34646
Total Attendances . . . . .	16899	11908	2019	..	32872	10844	2661	1855	54451	24607	79058
In-patients :—											
(a) Total number of persons admitted for treatment during the year . . . . .	27	13	..	..	10	4	1	2	38	19	57
(b) Aggregate number of "in-patient days" of treatment given . . . . .	807	624	..	..	88	127	11	20	906	771	1677
	Under 1 year		1 and under 5 years		5 and under 15 years		15 years and over		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total
Number of cases of congenital syphilis in Item 3 above, classified according to age periods . . . . .	1	4	3	3	6	7	19	25	29	39	68

The number of persons attending the Early Treatment Clinic, St. Luke's Hospital, was 2,025.

TABLE 1.

## SYPHILIS.

Total Number of Persons attending Manchester Clinics suffering from Syphilis and  
Average Number of Attendances per Individual, 1926-1940.

Year	Number of Patients	Number of Attendances	Average Number of Attendances per Patient
1926-30 (average per annum) ..	3,538	32,875	9.3
1931-35    ,,    ,,    ,,    ,,	2,670	43,111	16.2
1936-40    ,,    ,,    ,,    ,,	2,392	34,552	14.4
1936   ..   ..   ..   ..   ..   ..	2,709	40,330	14.9
1937   ..   ..   ..   ..   ..   ..	2,441	36,648	15.0
1938   ..   ..   ..   ..   ..   ..	2,427	35,129	14.5
1939   ..   ..   ..   ..   ..   ..	2,266	31,846	14.1
1940   ..   ..   ..   ..   ..   ..	2,118	28,807	13.5

TABLE 2.

## GONORRHOEA.

Total Number of Persons attending Manchester Clinics suffering from Gonorrhœa and  
Average Number of Attendances per Patient, 1926-1940.

Year	Number of Patients	Number of Attendances	Average Number of Attendances per Patient
1926-30 (average per annum) ..	3,670	43,824	11.9
1931-35    ,,    ,,    ,,    ,,	2,915	74,703	26.0
1936-40    ,,    ,,    ,,    ,,	2,496	88,300	35.3
1936   ..   ..   ..   ..   ..   ..	2,572	88,403	34.4
1937   ..   ..   ..   ..   ..   ..	2,497	110,149	44.1
1938   ..   ..   ..   ..   ..   ..	2,619	119,131	45.5
1939   ..   ..   ..   ..   ..   ..	2,674	80,103	29.9
1940   ..   ..   ..   ..   ..   ..	2,119	43,716	20.6

## MIDWIVES' SECTION.

All the arrangements sanctioned by the City Council for midwifery services have been maintained throughout the year.

## Municipal Midwives.

This service started in 1937 with a staff of 53 midwives. The number has now been increased to 57.



5,138 applications for municipal midwives were received. 4,478 patients were delivered, 552 were transferred to hospital on account of unsatisfactory conditions before or during labour, and 72 pregnancies ended before the 28th week. 253 applications were withdrawn; 75 of these mothers were evacuated under the Government scheme, others were withdrawn on account of domestic reasons and removals from the district.

Of the cases attended, 792 applied for assistance, of which 509 were assessed to pay part fee and for 283 no charge was made.

The following table gives the work done by the municipal midwives, compiled from their weekly returns :—

Deliveries as midwife .. .. .	4,027
„ as maternity nurse .. .. .	461
Cases of abortions nursed .. .. .	72
Morning nursing visits .. .. .	60,496
Evening „ „ .. .. .	16,254
Nursing visits to patients discharged from municipal hospitals on or after the 10th day .. .. .	2,332
Ante-natal visits to patients in their own homes .. .. .	13,509
Ante-natal visits by patients to midwives' homes .. .. .	11,012
Attendances by midwives at ante-natal clinics .. .. .	1,652

Of the 4,478 cases attended by the midwives—

2,057 were delivered between 9 a.m. and 9 p.m., and

2,421 were delivered between 9 p.m. and 9 a.m.

*Analysis of Cases taken by Midwives who notified intention to practice.*

Midwives notifying intention to practice	Number of Midwives	Midwife only at the Case		Midwife with Doctor called in		Midwife as Maternity Nurse	Total Number of Cases	Per cent. of Births in City
		Primi-parae	Multi-parae	Primi-parae	Multi-parae			
<b>1. BIRTHS AT HOME.</b>								
(a) Municipal midwives .. .. .	670	456	2,194	479	888	461	4,478	42.07
(b) Independent midwives living in Manchester area .. .. .	17	33	165	21	49	75	343	3.13
(c) Independent midwives living outside Manchester area .. .. .	6	16	17	6	6	23	68	.6
(d) Midwives employed by District Nursing Institution :— Manchester .. .. . County Nursing Association } ..	21	42	137	33	49	49	310	2.9
	104	547	2,513	539	992	608	5,199	48.70
<b>2. BIRTHS IN INSTITUTIONS.</b>								
Midwives employed in registered Nursing Homes and having no resident medical practitioner ..	45	322	241	134	42	325	1,064	9.99
	149	869	2,754	673	1,034	933	6,263	58.69

The total number of cases taken by midwives shows an increase of 794. There was a decrease of 805 of all notified births.

*Practical Training of Midwives.*

An Association for the training of pupil midwives for the Second Part of the training under the new Rules of the Central Midwives Board (Section B) was formed in 1940, the Association to be known as the "City of Manchester and St. Mary's District Midwifery Training Association." 7 municipal midwives were approved by the Central Midwives Board as teachers in district midwifery.

Table showing Calls for Medical Assistance.

	Records sent to Doctors		Records sent to Ante-natal Clinics
	Assistance in labour and puerperium	Assistance during pregnancy	
Midwives in municipal and private practice	2,443	512	1,962
Midwives of District Nursing Association ..	95	1	15
Midwives in maternity homes .. .. .	207	6	0

11.79 per cent. of all records of sending for medical aid by midwives for emergencies during labour and the puerperium were for delayed labour and 26.89 per cent. for ruptured perineum. This is respectively 9.49 per cent. and 19.63 per cent. of all their cases, and compares with 16.48 per cent. and 26.52 per cent. for 1939.

50.55 per cent. of all the records were sent for assistance during labour. 33.54 per cent. were for unsatisfactory conditions occurring during the puerperium. Of these 25.49 per cent. were for the infant.

Maternal Deaths.

26 deaths from child-birth occurred amongst Manchester mothers and were investigated in accordance with the request of the Ministry of Health.

It is satisfactory to note a decrease of 10 in the maternal deaths—36 in 1939 and 26 in 1940.

There is a decrease of one in the deaths from abortion and early pregnancy.

Cause of Death in Child-birth during 1940.

Cause	Normal Full-term Labour	Abnormal Full-term Labour	Abortion	Total	Rate per 1,000 Registered Live and Still Births	
					1939	1940
Puerperal Sepsis .. .. .	1	2	2	5	.78	.46
Other Causes .. .. .	15 (1 undelivered)		6	21	2.28	1.97
				26	3.06	2.43

Incidence of Puerperal Sepsis.

	Puerperal Sepsis Incidence and Case Mortality	
	Cases of Puerperal Sepsis per 1,000 Notified Births	Mortality per cent. of Notified Puerperal Sepsis Cases
1932 .. .. .	7.32	17.7
1933 .. .. .	10.29	16.16
1934 .. .. .	10.18	9.76
1935 .. .. .	9.20	20.16
1936 .. .. .	8.78	17.39
1937 .. .. .	6.22	21.11
1938 .. .. .	6.62	18.39
1939 .. .. .	10.61	7.5
1940 .. .. .	8.64	6.4



Analysis of 21 deaths due to other causes than puerperal sepsis :—

Toxaemia of pregnancy	{	Eclampsia .. .. .	1
		Toxaemia following operation for ruptured ectopic .. .. .	1
Haemorrhage	{	Ante-partum haemorrhage .. .. .	1
		Intra-partum haemorrhage .. .. .	1
		Post-partum haemorrhage following concealed accidental haemorrhage .. .. .	1
Shock	{	Obstetric shock .. .. .	2
		Shock following abortion .. .. .	1
Pulmonary embolism .. .. .			4
Ectopic gestation .. .. .			2
Pneumonia following abortion .. .. .			2
Pneumonia and acute endocarditis .. .. .			1
Broncho pneumonia .. .. .			1
Haemolytic anaemia .. .. .			1
Intestinal obstruction following Caesarean Section .. .. .			1
Peritonitis following Caesarean Section for fibroid of uterus .. .. .			1
			21

### OPHTHALMIC SECTION.

During the year, 769 new cases of eye disease were visited. Of these, 294 were in older children and 475 in infants. The total number of visits paid was 7,145.

#### *Ophthalmia Neonatorum.*

140 cases were notified by private practitioners or by the Royal Eye Hospital as cases of ophthalmia neonatorum. A further 335 cases were reported by midwives who had advised medical aid for unsatisfactory eye conditions not subsequently notified as ophthalmia neonatorum. Of these, 36 related to infants discharged from hospital (with their mothers) on or after the 10th day.

#### *Corneal Cases.*

There were 2 cases with involvement of the cornea, one more than last year. In both cases the eyes cleared under treatment.

### CHILD WELFARE CENTRES.

At the end of 1940 there were 21 municipal infant welfare centres and 1 voluntary centre.

There are at the various centres 122 weekly medical consultations, comprising 79 infant sessions, 3 special birthday sessions, 6 sunlight, 31 ante-natal, and 3 toddlers' sessions, at which an attempt is made to secure the attendance of children between 2 and 5 years of age only.

At the end of the year there were on the centre register :—

5,736 children under 1 year.  
4,160 children between 1 and 2 years.  
6,187 children between 2 and 5 years.

70 per cent. of all Manchester children under 1 year attended at least once.

The tables show the work done at the Child Welfare Centres during the year.

180,312 attendances were made at these sessions :—

105,177 by children under 1 year.  
34,167 „ between 1 and 2 years.  
21,552 „ „ 2 and 3 „  
12,714 „ „ 3 and 4 „  
6,702 „ „ 4 and 5 „

#### *Toddlers' Sessions.*

A weekly examination session is set apart for children between 2 and 5 years of age at Newton Heath, Ancoats, and Openshaw Centres.

950 invitations were sent out to 2-year-olds, of whom 105 were brought for examination ; 852 were sent to 3-year-olds, of whom 79 were brought for examination.



## ANTE-NATAL CASES AT CENTRES AND NUMBER ATTENDING FOR POST-NATAL EXAMINATION.

Centre	Normal Births		Abnormal Births		Died	Attended for post-natal examination
	Live Births	Stillbirths	Live Births	Stillbirths		
Ancoats .. .. .	166	2	15	1	1	3
Ardwick .. .. .	295	4	46	13	—	41
Blackley .. .. .	246	2	25	5	—	16
Chorlton-upon-Medlock ..	197	1	20	7	—	12
Collyhurst .. .. .	506	8	27	7	2 died before confinement	16
Cheetham .. .. .	242	2	23	8	—	16
Clayton .. .. .	190	6	16	2	—	4
Gorton .. .. .	370	4	34	9	1 died before confinement	9
Harpurhey .. .. .	317	8	31	7	—	37
Hulme .. .. .	114	—	28	—	1	2
Levenshulme .. .. .	180	1	49	12	1 died before confinement	20
Newton Heath .. .. .	233	5	33	6	1	25
Northenden .. .. .	282	3	30	13	—	59
Openshaw .. .. .	413	6	98	17	2	23
Rusholme .. .. .	259	6	13	10	1	26
Withington .. .. .	263	6	26	1	—	28
	4,273	64	514	118	10	337

### Causes of Deaths of Mothers attending the Centre Ante-Natal Clinics.

Pulmonary embolism .. .. .	2
Intra-partum haemorrhage .. .. .	1
Phlebitis .. .. .	1
Cardiac failure due to sepsis .. .. .	1
Myocardial failure (before delivery) .. .. .	1
Puerperal sepsis .. .. .	1
Aortic stenosis (before delivery) .. .. .	1
Encephalitis (before delivery) .. .. .	1
Pneumonia (before delivery) .. .. .	1

# Ante-Natal Cases at Centres and Results in Delivery.

CENTRE	On Register Jan. 1st, 1940	New Cases	Transferred from another Centre	TOTALS	On Register Jan. 1st, 1941	Term Births	Still-births included in Term Births	Premature Births	Still-births included in Premature Births	Mothers left District before Confinement		Transferred to another Centre	Mothers not Pregnant	TOTALS
										Evac.	Others			
Ancoats .. .. .	45	192	3	240	28	176	3	8	..	12	9	4	3	240
Ardwick .. .. .	93	419	3	515	82	322	6	36	6	35	24	4	12	515
Blackley .. .. .	62	317	6	385	75	259	2	19	3	18	10	3	1	385
Chorlton-upon-Medlock ..	81	253	3	337	49	210	2	15	6	38	15	2	8	337
Collyhurst .. .. .	116	589	6	711	122	537	10	11	5	12	6	8	13	709+2
Cheetham.. .. .	80	327	1	408	87	271	6	4	..	12	26	2	6	408
Clayton .. .. .	46	223	5	274	44	193	2	21	5	2	6	5	3	274
Gorton .. .. .	118	482	1	601	127	397	8	20	9	25	18	3	10	600+1
Harpurhey .. .. .	93	400	..	493	100	352	10	11	4	14	8	2	7	493
Hulme .. .. .	39	178	3	220	38	126	2	16	3	21	12	3	4	220
Levenshulme .. .. .	75	281	3	359	75	217	6	25	6	20	13	4	4	358+1
Newton Heath .. .. .	58	362	6	426	92	261	7	16	1	12	28	5	12	426
Northenden .. .. .	97	356	5	458	113	312	4	16	4	2	4	6	5	458
Openshaw .. .. .	142	580	6	728	150	482	14	52	9	8	27	1	8	728
Rusholme.. .. .	74	378	7	459	79	279	7	9	3	41	34	5	12	459
Withington .. .. .	100	356	2	458	88	288	6	8	1	37	26	3	8	458
Totals .. .. .	1,319	5,693	60	7,072	1,349	4,682	95	287	65	309	266	60	116	a 7,068+4

a Plus 4 died before confinement.

### Comparison of Children in Age Groups attending the Welfare Centres.

CENTRE	On Register January 1st, 1940			New Patients			Died	Marked off not attending			On Register, January 1st, 1941		
	0—1	1—2	2—5	0—1	1—2	2—5		0—1	1—2	2—5	0—1	1—2	2—5
Abbey Hey .. .. .	216	145	166	357	52	107	6	80	92	85	277	206	274
Ancoats .. .. .	202	157	242	224	38	84	14	116	91	100	158	141	269
Ardwick .. .. .	245	266	215	496	96	199	34	119	156	164	365	246	379
Blackley .. .. .	217	157	193	427	76	118	4	118	77	95	338	218	305
Chorlton-upon-Medlock ..	286	205	285	460	110	197	19	136	96	108	364	312	441
Cheetham .. .. .	290	105	149	375	82	110	10	109	135	129	266	185	218
Clayton .. .. .	149	97	109	247	38	70	10	49	61	65	206	119	152
Collyhurst .. .. .	323	199	260	512	79	169	19	156	148	201	391	236	335
Chorlton-cum-Hardy ..	169	108	169	232	46	85	1	58	100	56	164	148	251
Didsbury .. .. .	115	82	121	186	22	59	1	23	55	46	132	119	190
West Gorton .. .. .	196	157	208	421	78	169	15	144	74	138	299	197	322
Harpurhey .. .. .	245	183	189	397	67	134	12	82	123	120	297	209	290
Holy Name .. .. .	15	22	43	35	11	11	2	17	19	34	9	19	25
Hulme .. .. .	154	97	116	283	59	80	17	97	54	94	218	134	151
Levenshulme .. .. .	194	172	191	464	66	117	6	86	129	102	326	230	292
Miles Platting .. .. .	76	85	103	..	..	..	..	76	85	103	..	..	..
Newton Heath .. .. .	267	163	241	439	73	213	9	137	77	134	349	234	391
Northenden .. .. .	274	238	358	344	95	218	5	44	124	201	257	251	518
Openshaw .. .. .	284	187	231	461	65	145	23	83	113	202	334	253	295
Rusholme .. .. .	387	93	250	506	80	148	17	137	150	127	382	211	336
Sharston .. .. .	241	169	252	330	89	200	9	26	76	120	240	230	397
Wilbraham .. .. .	62	46	52	78	6	33	1	19	33	15	66	50	79
Withington .. .. .	234	179	270	420	76	158	6	82	136	248	298	212	277
Totals .. .. .	4,841	3,312	4,413	7,694	1,404	2,824	240	1,994	2,204	2,687	5,736	4,160	6,187
COMPARATIVE TABLES FOR PREVIOUS TWO YEARS:—													
1939 .. .. .	5,688	4,292	6,479	7,951	1,570	2,858	228	2,406	4,474	7,386	4,841	3,312	4,413
1938 .. .. .	5,615	4,447	6,622	8,551	1,917	3,792	312	2,228	3,620	6,220	5,688	4,292	6,479



### National Milk Scheme.

The national dried milk scheme came into operation at the beginning of August and relieved the Corporation of its responsibility with regard to liquid milk. National dried milk was distributed through the Child Welfare Centres to all holders of "dried milk permits," issued on a doctor's certificate. A small quantity of named brands and half-cream dried milk was supplied on the recommendation of the centre medical officers.

## MATERNITY BEDS.

In each of the two large general hospitals—Crumpsall and Withington—the City maintains a maternity unit. These together provide 190 beds.

In addition to these the Public Health Committee maintains eight maternity beds (2 in St. Mary's Hospital for first and abnormal cases, 2 in Denison House, 2 in Crossley Hospital, and 2 in Beechmount). 327 applications were received for beds. 51 of these were cancelled and 3 were not accepted as the applicants resided outside the City area. Of the 273 remaining, 200 were confined during the year.

## CHILD LIFE PROTECTION.

(Public Health Act, 1936.)

### *Children Nursed for Hire or Reward.*

Foster-mothers on register at beginning of year	.. .. .	132
Foster-mothers on register at end of year	.. .. .	135
Children on register at beginning of year	.. .. .	155
„ placed on register during year	.. .. .	242
„ who ceased to come under the Child Life Protection provisions of this Act	.. .. .	240
„ remaining on books at end of year	.. .. .	157

### *Details as to the number of children who ceased to come under the Child Life Protection provisions of this Act.*

Returned to parent or relative	.. .. .	144
Attained the age of 9 years	.. .. .	8
Sent to special homes	.. .. .	10
Removed to other districts	.. .. .	21
Admitted to hospitals	.. .. .	24
Deaths	.. .. .	1
Evacuated	.. .. .	8
Adopted without payment	.. .. .	22
Taken for trial period with view to adoption	.. .. .	2
		240

### *Licences Granted.*

Licensed for 4 children	.. .. .	1
„ „ 3 „	.. .. .	2
„ „ 2 „	.. .. .	8
„ „ 1 child	.. .. .	39
„ „ 1 child for 6 months	.. .. .	5
„ „ 1 child for 3 months	.. .. .	27
„ „ 1 child for 2 months	.. .. .	4
„ „ 2nd child for 3 months	.. .. .	3
„ „ 3rd child for 3 months	.. .. .	1
„ „ 2 children for 3 months	.. .. .	1
Licences renewed permanently	.. .. .	7

Licences refused .. .. .	6
Cautions .. .. .	13
<i>Adoptions.</i>	
By foster-mothers .. .. .	10
By other persons .. .. .	12
	<hr/>
	22
	<hr/>

## WORK DONE BY THE HEALTH VISITORS.

### *Notification of Births Act.*

The total number of notifications received under the Notification of Births Act was 11,315. A certain number of these were notified from Blackpool and Prestbury, the mothers being Manchester evacuees.

The following table shows the source of notification and the place of birth :—

By whom notified	Place of Birth						Total	
	Manchester		Blackpool		Prestbury		Live	Still
	Live	Still	Live	Still	Live	Still		
Doctors or Institutions ..	5,586	371	357	8	290	16	6,233	395
Midwives .. .. .	4,545	142	—	—	—	—	4,545	142
	10,131	513	357	8	290	16	10,778	537
	11,315							

### Infantile Mortality and Young Child Mortality.

1—2 Years and 2—5 Years per 1,000 Births.

*Quinquennial Periods, 1900—1939.*

Average—6 years	Infantile Mortality	Child Mortality 1—2 years	Child Mortality 2—5 years
1900—1904 .. .. .	178.8	53.8	41.0
1905—1909 .. .. .	152.7	46.2	35.9
1910—1914 .. .. .	133.5	44.3	35.3
1915—1919 .. .. .	111.1	40.3	39.8
1920—1924 .. .. .	94.6	31.2	22.1
1925—1929 .. .. .	91.3	28.2	23.1
1930—1934 .. .. .	78.4	18.9	17.7
1935—1939 .. .. .	72.7	12.0	12.3

### *Still Births.*

The health visitors visited the mothers of 478 still-born children occurring in the practice of doctors and midwives and in the city hospitals.

*Ante-natal Care.*

492 still-births and 323 neo-natal deaths occurred in the city. 717 special visits were paid by the health visitors to these mothers and in this way 50 expectant mothers were brought to our notice. These were revisited at intervals of one month, a total of 177 such visits being paid.

The health visitors made 8,729 visits to expectant mothers discovered in the course of routine home visits. Many of these subsequently attended the ante-natal clinics. Altogether 14,816 visits were made by the health visitors to expectant mothers, many of these being to arrange for their evacuation under the Government's "trickle" scheme to Blackpool.

**Work at Monsall Disinfecting Station.***Vermin.*

The Education Department is the main source of notification of verminous cases. The following table gives comparative figures from all sources for the last three years :—

	Year		
	1938	1939	1940
School Medical Officer .. .. .	469	252	1,155
General Practitioners .. .. .	—	—	6
Voluntary and Municipal Hospitals .. .. .	—	1	3
Centre Medical Officers .. .. .	4	15	16
Health Visitors .. .. .	24	7	60
Applied for voluntary treatment .. .. .	14	17	23
Discovered at Monsall .. .. .	—	—	28
Salvation Army .. .. .	—	—	31
Refugees .. .. .	—	—	89
H.M. Forces .. .. .	—	—	22
Total .. .. .	511	292	1,433

114 school children were compulsorily cleansed and 222 adults applied for voluntary cleansing.

**SCABIES.**

The main source of notification is the Education Department. Many additional cases are, however, brought to our notice either as contacts of those notified by the School Medical Officer or as new cases.

The source of these notifications is shown as follows :—

	Year		
	1938	1939	1940
School Medical Officer .. .. .	938	713	1,404
Booth Hall Hospital .. .. .	—	—	1
General Practitioners .. .. .	102	160	392
Centre Medical Officers .. .. .	35	22	101
Health Visitors .. .. .	92	66	219
Discovered at Monsall .. .. .	—	59	6
H.M. Forces .. .. .	—	12	71
Salvation Army .. .. .	—	—	2
Refugees .. .. .	—	—	25
A.R.P. Workers .. .. .	—	—	17
Voluntary Hospitals .. .. .	40	15	14
Skin Hospital .. .. .	—	—	582
Applied voluntarily .. .. .	83	135	213
Total .. .. .	1,290	1,183	3,047



The average number of treatments per person is 3. 2,356 persons were treated and 6,078 treatments given. This is shown in the following table.

Year	Males (adult)	Females (adult)	School Children	Children under 5 years	Total
1938 .. .. .	598	1,167	268	605	2,638
1939 .. .. .	679	686	339	578	2,282
1940 .. .. .	1,350	2,544	748	1,436	6,078

The increase in the number of notifications received and treatments given is explained by (a) the thoroughness of the health visitors' investigation to discover source of infection and contacts, and (b) the greater use made of the Monsall Station by medical practitioners.

Each notified and subsequent case is visited by the health visitor to discover contacts and to see that treatment is obtained. Adult workers who are employed until late at night and, therefore, difficult to see, are frequently a source of re-infection. The re-notification of a member of their family, however, enables pressure to be put upon them to attend for treatment. During the year the part-time nurses at Monsall were required to work 362 sessions, out of which 188 were evening sessions to suit the convenience of workers who could not attend during the day.

The disinfection of bedding and other infected articles is a condition of treatment at Monsall. Of the 1,550 households in which scabies occurred, 1,490 agreed to this disinfection and 60 refused. The reasons given for this refusal were "fear of what neighbours might think"—"No back door," etc. In all cases some attempt to disinfect by boiling and washing in a disinfectant was made. When a re-notification is received from a household in which the disinfection of the bedding was previously refused the assistance of the Sanitary Section is obtained.

An arrangement has been made with the School Medical Department whereby school children may attend Monsall for treatment if other infected members of the family are attending. The number of persons who fail to begin or complete treatment is considerably less than it was a few years ago, and a feature of the treatment carried out at Monsall is the greater use made by medical practitioners of the facilities provided.

INFLUENZA AND INFLUENZAL PNEUMONIA.

The visiting of influenza had to be discontinued owing to pressure of work.

157 cases of influenzal pneumonia were notified and 22 discovered through the death returns, a total of 179 cases. 173 of these cases were visited by the health visitors.

PNEUMONIA.

During 1940 the following notifications of pneumonia were received :—

Primary pneumonia	{	Lobar .. .. .	1,047	1,551
		Lobular .. .. .	500	
		Unclassified .. .. .	4	
<hr/>				
Influenzal pneumonia	.. .. .	157		
Secondary pneumonia	.. .. .	66		
<hr/>				
Total	.. .. .	1,774		

The total for the preceding year was 1,304.

In addition to the above, however, 366 deaths from pneumonia—344 primary, 22 influenzal, and nil secondary, all being un-notified cases—were brought to the notice of the department through the death returns : thus the total number of known pneumonia cases for the year was 2,140, as compared with 1,575 for the previous year.

### Primary Pneumonia.

Of the 1,895 known cases of primary pneumonia, 1,127 were classified as lobar pneumonia, 759 as lobular pneumonia, and 9 simply as pneumonia. The number of cases which were investigated was 1,795, and of these the case-fatality was 19.81 per cent. for lobar pneumonia and 46.75 per cent. for lobular pneumonia, as compared with 22.09 per cent. for lobar pneumonia and 52.72 per cent. for lobular pneumonia in 1939.

### Secondary Pneumonia.

Secondary pneumonia is not notifiable, but the attention of the department has been directed to 66 cases during the year. Of these 64 were investigated and were associated with the following diseases :—

Measles	.. .. .	54
Whooping Cough	.. .. .	8
German Measles	.. .. .	2
		<hr/>
		64

The case-fatality rate was 6.25 per cent., a decrease on the rate for the previous year, when it was 19.23 per cent. With 12 exceptions the patients were all children under 5 years of age.

## MILK CONTROL.

### *City Farms.*

There are 50 farms in the city with milch herds, including one producing Tuberculin Tested (Certified) milk and 12 producing Accredited milk. Regular inspections have been carried out and samples of milk have been taken for examination for tubercle bacilli and cleanliness. The milk at 10 of the city farms was found to contain tubercle bacilli, and the necessary action was taken.

Three notices for isolation of cattle suffering from acute mastitis were served under Section 11 of the Milk and Dairies Order 1926, and Section 25 of the Food and Drugs Act, 1938.

Quarterly samples of milk from the 13 designated farms, have, on the whole, been found to be satisfactory. 113 visits have been paid to the farms by the Ministry of Agriculture's Veterinary inspectors, the number of cows examined being 2,475.

### *City Dairies, Milk Bars, and Milk Shops.*

The Milk Control inspectors have paid over 4,000 visits to dairies, milk bars and milk shops during the year.

The working and testing of the pasteurizing plants at the 15 dairies licensed for this purpose have been carried out once monthly, in addition to routine visits.

Prompt action was required by the department in dealing with a consignment of milk which contained the milk of a cow which had died from anthrax.

### *Ice Cream.*

768 premises are registered for the manufacture and/or sale of ice cream.

### *Manchester Corporation's Hospitals Milk Supply.*

Frequent examination of samples of pasteurized milk supplied to the Corporation hospitals and institutions has been made and the results have, on the whole, been satisfactory.

Raw milk supplied to Monsall Hospital, Rose Hill Convalescent Home and Booth Hall Hospital has also been sampled frequently. On one occasion, the milk supplied to the latter hospital was found to be infected with b. tuberculosis. The milk, therefore, was pasteurized for a period until the source of infection had been removed.

### *School Milk Supply.*

The supply of milk to school children has been regularly sampled.



TABLE I.

## Particulars of Milk Samples.

*Samples examined for Tubercle Bacilli.*

	No. of samples taken	No. found to contain tubercle bacilli
Collected by Food and Drugs inspectors at :—		
(a) Railway Stations .. .. .	—	—
(b) Vehicles entering the city by road .. ..	476	39
Collected by Milk Control inspectors at :—		
(a) Hospitals and Institutions .. .. .	60	1
(b) City dairies, milk shops, and milk bars ..	169	10*
(c) Vehicles .. .. .	305	34
(d) Railway stations.. .. .	1	—
(e) City farms .. .. .	128	11*
(f) Schools .. .. .	16	1
Samples taken at Abergele Sanatorium farm .. ..	15	—
Total .. .. .	1,170	96

\* Includes 1 Control sample.

*Samples examined for Chemical and Bacteriological Analysis.*

Collected at hospitals, dairies, vehicles, schools, etc. : 1,081.

TABLE II.

## Analysis of Farms tested for Tubercle Bacilli.

County	No. of farmers represented by samples of milk	No. of farmers sending tuberculous milk	Percentage
Cheshire .. .. .	383	42	10.97
Lancashire .. .. .	141	14	9.09
Derbyshire .. .. .	62	7	11.29
Staffordshire .. .. .	28	4	14.29
Yorkshire .. .. .	35	3	8.57
Montgomeryshire .. .. .	1	1	—
Total .. .. .	650	71	10.92



TABLE III.

## Food and Drugs Act, 1938, and Milk and Dairies Orders.

Registered farm premises and dairies—December 31st, 1940 .. .. .	130
Registered milk shops—December 31st, 1940 .. .. .	810
Persons registered for the sale of milk in properly closed bottles only—December 31st, 1940 .. .. .	1,005
Visits to farms, dairies, milk shops, etc., by Milk Control Inspectors .. .. .	4,225
Applications for registration approved .. .. .	686
Applications for registration refused .. .. .	4
Persons removed from register by resolution of City Council .. .. .	—

TABLE IV.

## Milk (Special Designations) Orders, 1936 and 1938.

*Licences issued during the year.*

Producer's licence to use the designation "Tuberculin Tested" .. .. .	1
Dealer's licence to use the designation "Tuberculin Tested" .. .. .	45
Producer's licence to use the designation "Accredited" .. .. .	12
Dealer's licence to use the designation "Accredited" .. .. .	19
Dealer's licence to use the designation "Pasteurized" :—	
(a) Pasteurizing establishments .. .. .	15
(b) Shops .. .. .	6
Supplementary licence to use the designation "Tuberculin Tested" .. .. .	4
Supplementary licence to use the designation "Accredited" .. .. .	3
Supplementary licence to use the designation "Pasteurized" .. .. .	5

TABLE V.

## Tuberculous Infection in Milk, 1901—1940.

YEAR	Number of farmers represented by samples of milk	Number of farmers sending tuberculous milk	Percentage	Percentage of Farmers from EACH COUNTY whose milk was proved to contain Tubercle Bacilli							
				Cheshire	Derbyshire	Staffordshire	Shropshire	Lancashire	Yorkshire	Cumberland	Montgomeryshire
Total for 40 years (1901—1940)	21,384	2,402	11·23								
1939	811	90	11·10	12·47	7·02	12·62	—	10·37	—	—	—
1940	650	71	10·92	10·97	11·29	14·29	—	9·09	8·57	—	100·00

**TABLE VI.**  
**Graded and Ungraded Milks—Tuberculosis Rate.**

	TUBERCULIN TESTED	ACCREDITED	PASTEURIZED	UNGRADED	TOTAL MILKS
No. of samples taken	44	138	180	803	1,165
No. found to contain tubercle bacilli ..	1	16	2*	77	96
Percentage .. ..	2.27	11.59	1.11	9.59	8.24

\* On investigations being made into these two cases it was found that the milk was ordinary raw untreated milk which had been wrongly labelled "Pasteurized."

It should be pointed out that the tuberculosis rate for "Accredited" milk given above is apt to be misleading. It does not represent truly the amount of tubercle bacilli found in this grade of milk, inasmuch as a large quantity of milk from "Accredited" herds is sold as ordinary ungraded milk and is, therefore, included in the "Ungraded Milk" figure.

### SANITARY SECTION.

#### FOOD SUPERVISION.

Samples procured (representing 134 different articles of food and drugs) .. ..	3,541
Samples contravening Food and Drugs Act and Regulations (equivalent to 3.27 per cent. of the total samples) .. .. .	116
Milk samples analysed .. .. .	1,622
Milk samples adulterated (equivalent to 6.04 per cent. of the samples analysed) ..	98

#### Public Health (Preservatives in Food) Regulations, 1925-27.

Particulars of samples examined by the Public Analyst for the presence of preservative :—

Samples of milk .. .. .	1,622
„ „ other foodstuffs .. .. .	572
„ „ foodstuffs specially submitted .. .. .	314

Four infringements of the regulations were reported.

#### Public Health (Condensed Milk) Regulations, 1923 and 1927.

#### Public Health (Dried Milk) Regulations, 1923 and 1927.

Samples of condensed milk examined .. .. .	19
„ „ „ contravening the Regulations .. ..	Nil
Samples of dried milk examined .. .. .	20
„ „ „ contravening the Regulations .. .. .	1

#### Artificial Cream—Section 28, Food and Drugs Act, 1938.

Registered premises at 31st December, 1940 .. .. .	2
Visits to registered premises during the year .. .. .	2

#### Registration of Factories and Wholesale Premises.

#### Section 34, Food and Drugs Act, 1938.

(a) Margarine factories :—

Number on register .. .. .	1
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(b) Wholesale dealers in margarine and margarine cheese :—

Premises on register, 31st December, 1939 .. .. .	109
Premises registered during 1940 .. .. .	2
Premises discontinued during 1940 .. .. .	1
Premises on register, 31st December, 1940 .. .. .	110

(c) Butter factories :—

Premises on register .. .. .	2
Visits paid to registered premises .. .. .	112

**FOOD PREPARATION PREMISES.****Section 14, Food and Drugs Act, 1938.**

On register at 31st December, 1939 .. .. .	455
Premises registered during the year .. .. .	10
Premises discontinued during the year .. .. .	4
Premises on register at 31st December, 1940 .. .. .	461
Inspections .. .. .	1,391
Minor defects or dirty conditions .. .. .	20
Minor defects or dirty conditions remedied .. .. .	20

**BAKEHOUSES.**

On register at 31st December, 1939 .. .. .	557
Registered during 1940 .. .. .	5
Removed from register during 1940 .. .. .	24
On register at 31st December, 1940 :—	
Above ground .. .. .	532
Underground .. .. .	6
Inspections .. .. .	2,986

**RESTAURANT AND CAFE KITCHENS.**

Restaurant and cafe kitchens recorded in the department at 31st December, 1940 .. .. .	275
Inspections .. .. .	1,013
Minor defects or dirty conditions remedied after caution .. .. .	34

**HOUSING ACTIVITIES.***Corporation Estates.*

Occupied houses (excluding tenement dwellings) on Corporation Estates at 31st December .. .. .	29,242
Occupied flats at 31st December .. .. .	1,805
Tenement dwellings at 31st December .. .. .	951

**HOUSE INSPECTION.***Housing Act, 1936, and Housing Consolidated Regulations.*

Systematic house inspection has been suspended owing to the war.

*Public Health and Local Acts.*

Primary inspections, as a result of complaints or investigation of infectious disease .. .. .	12,845
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The defects found have been dealt with as follows :—

(a) Remedied as a result of the service of preliminary notices at ..	2,436 houses.
(b) Statutory notices served under Public Health (or local) Acts with regard to .. .. .	3,616 „
Remedy effected by the owners at .. .. .	2,476 „
Remedy effected by the local authority in default at .. .. .	390 „
House inspections (including revisits) for all purposes .. .. .	78,910
Remedy of urgent defects at houses to be dealt with eventually under the Housing Act, 1936 :—	
Preliminary notices or intimations served on the owners with regard to .. .. .	2,229 houses.
Work effected at .. .. .	1,108 „

**Houses Let-in-Lodgings.**

Houses let-in-lodgings at 31st December (including 367 which are “farmed” houses) .. .. .	946
Inspections made with regard to compliance with the byelaws ..	6,410
Infringements of the byelaws remedied as a result of verbal cautions ..	84



## Housing Conditions—Year ended 31st December, 1940.

### General Statistics.

#### 1. *Inspections of Dwelling-houses during the year.*

(1) (a) Total number of dwelling-houses inspected for housing defects (Public Health Act) .. .. .	12,898
(b) Number of inspections made for the purpose .. .. .	70,275
(2) (a) Number of dwelling-houses (included in sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 to 1932 .. .. .	—
(b) Number of inspections made for the purpose .. .. .	—
(3) Number of dwelling-houses found to be in a state so dangerous or prejudicial to health as to be unfit for human habitation .. .. .	—
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation .. .. .	—

#### 2. *Remedy of defects during the year without service of formal notices.*

Number of defective dwelling-houses repaired in consequence of informal action by the local authority or their officers .. .. .	2,436
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#### 3. *Action taken under Statutory Powers during the year.*

##### (A) *Proceedings under Sections 9, 10, and 16 of the Housing Act, 1936 :—*

(1) Number of dwelling-houses in respect of which notices were served requiring repairs .. .. .	—
(2) Number of dwelling-houses in which defects were remedied after service of formal notices .. .. .	—
(a) By owners .. .. .	—
(b) By local authority in default of owners .. .. .	—

##### (B) *Proceedings under Public Health Acts :—*

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied.. .. .	3,616
(2) Number of dwelling-houses in which defects were remedied after service of formal notices—	
(a) By owners .. .. .	2,476
(b) By local authority in default of owners .. .. .	390

##### (C) *Proceedings under Sections 11 and 13 of the Housing Act, 1936 :—*

(1) Number of dwelling-houses in respect of which demolition orders were made .. .. .	—
(2) No. of dwelling-houses demolished in pursuance of demolition orders .. .. .	—

##### (D) *Proceedings under Section 12 of the Housing Act, 1936 :—*

(1) Number of separate tenements or underground rooms in respect of which closing orders were made .. .. .	—
(2) Number of separate tenements or underground rooms in respect of which closing orders were determined the tenement or room having been rendered fit .. .. .	—

## FACTORIES.

### 1.—*Inspection of Mechanical and Non-mechanical Factories, etc., under the Factories Act, 1937.*

Premises	Number of		Occupiers prosecuted
	Inspections	Written Notices	
Factories (with mechanical power) .. .. .	2,730	—	4
Factories (without mechanical power) .. .. .	541	—	—
Total .. .. .	3,271	—	4

*Outworkers.*

Firms in the City employing outworkers at 31st December, 1940 .. .. .	284
Outworkers employed in the City at 31st December, 1940 .. .. .	1,853
Employed by City firms who reside in districts of other local authorities .. ..	448
Total outworkers .. .. .	2,301
Inspections of homes of outworkers .. .. .	2,373
Prosecutions for failure to keep prescribed list of outworkers .. .. .	4
Fined .. .. .	4
Amount of fines .. .. .	£6 10s.

**Shops Acts, 1912—1936.***Shops Act, 1912.*

Orders made by the City Council for exemption from compulsory closing or for “ fixing the closing day ” or for “ fixing the closing hours ” .. .. .	46
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*Shops Act, 1934, Section 10.*

Shops on register .. .. .	19,216
Visits by shops inspectors .. .. .	1,514

**Water Supplies.***Town's Water.*

Source of supply—impounding reservoirs at Thirlmere, Lake District and Longdendale, Yorkshire—Derbyshire border.

All houses are furnished with town's water, except two cottages in Crumpsall, which are supplied from a spring, and in parts of Wythenshawe, where wells are the source of supply.

Samples taken during 1940 :—

For bacteriological examination .. .. .	52
For chemical examination .. .. .	52

The Waterworks Department also undertakes routine sampling, including samples from outlets of storage, etc., reservoirs and there is a reciprocal arrangement for exchange of results of analyses between the Public Health and Waterworks Departments.

Reports were referred to the Waterworks Department with regard to 103 houses where the pressure of water was inadequate.

*Well Water.*

There are 18 wells in the Wythenshawe District supplying 25 houses, 16 of which, supplying 23 houses, are situate at such a distance from the nearest service main as to render the provision of town's water impracticable.

A number of water samples were taken in districts where water mains had been damaged by enemy action. Where the conditions were found to be unsatisfactory, appropriate action was taken and subsequent samples were satisfactory.

**HOUSING ACT, 1936.****Slum Clearance.**

Owing to the cessation of slum clearance the following orders stand suspended :—

Bradford Road Compulsory Purchase Order and Clearance Orders Numbers 1 to 3.

St. George's Compulsory Purchase Orders Numbers 1 and 2 and Clearance Orders Numbers 1 to 5.

Hutchins Street, Bradford, Clearance Orders Numbers 1 to 3.

Harpurhey Compulsory Purchase Order.

Enoch Street Clearance Order.

Ruth Court Clearance Order.

Monday Street Clearance Order.

Oldham Road, New Cross, Clearance Orders, Numbers 1 to 17.

Fog Lane, Burnage, Clearance Order.

Dark Lane, Clarendon Road West, Clearance Order.

*Demolition of Properties.*—The following figures refer to property demolished during the year :—

(a) In clearance areas .. .. .	1,000
(b) Without formal action .. .. .	93
Total .. .. .	<u>1,093</u>
Displacement of persons from clearance areas .. .. .	3,405

**SUMMARY OF SLUM CLEARANCE ACTION TO THE END OF 1940.**  
(Ministry of Health Return—Form 256.)

	Dwelling-houses Demolished	Persons Displaced
Clearance areas .. .. .	8,294	32,958
Individual houses .. .. .	129	382
In addition to this return, the following houses have been demolished without formal action .. .. .	521	2,084
Totals .. .. .	8,944	35,424

**Eradication of Bed Bugs.**

The subjoined table is included to comply with Circular 1728 of the Ministry of Health, dated 25th October, 1938, with regard to the action taken for the eradication of bed bugs in dwelling-houses :—

(1)

Houses	Houses found to be infested	Houses Disinfested (includes Carry-over from 1939)
Council .. .. .	199	180
Other .. .. .	251	1,026
	450	1,206

**RATS AND MICE (DESTRUCTION) ACT, 1919.**

*Complaints.*

Four hundred and eighty complaints of the presence of rats or mice affecting 1,619 premises, were dealt with.

*Conditions Found.*

1,167 of the premises were infested with rats, 428 with mice, and at 24 premises no evidence of rats or mice could be found.

At 342 (29.3 per cent.) of the 1,167 rat-infested premises, rats had obtained ingress to the interior of the buildings, and at 825 (70.7 per cent.) premises infestation was confined to yards, passages, land, and gardens.

*Prevention of Re-infestation.*

Rat proofing was carried out at 1,573 premises ; 986 by occupiers, 585 by owners, and 2 by rat-catchers.



ABRIDGED  
REPORT

on the

Health of the City of Manchester

for

1941

## GENERAL STATISTICS FOR 1941.

Area of the City in acres	.. .. .	27,255
Census population for year 1931	<div> <div>Males .. 360,976</div> <div>Females 405,402</div> </div>	766,378
Estimated population at the middle of year 1941	<div> <div>Males .. 292,641</div> <div>Females 328,657</div> </div>	621,298
No. of persons per acre	.. .. .	23
Persons married per 1,000 of population	.. .. .	22.70
Live Births	<div> <div>Males .. 5,015</div> <div>Females 4,834</div> </div>	9,849
Live-birth rate per 1,000 of population	.. .. .	15.61
Still-births	<div> <div>Males .. 211</div> <div>Females 189</div> </div>	400
Deaths	<div> <div>Males .. 5,446</div> <div>Females 4,809</div> </div>	10,255
Recorded annual death-rate per 1,000 of population	<div> <div>Males .. 16.18</div> <div>Females 16.31</div> </div>	16.25
Deaths under 1 year of age per 1,000 births	.. .. .	86.10
Maternal mortality (per 1,000 live and still births)	.. .. .	2.83
Excess of deaths over registered births	.. .. .	406
Percentage of mortality occurring in public institutions	.. .. .	49.53
No. of occupied Structurally Separate Dwellings (Census 1931)	.. .. .	177,430
No. of persons per occupied Structurally Separate Dwelling (Census 1931)	.. .. .	4.32
No. of persons per house 1941 (Based on 202,135 houses connected with the water supply within the City)	.. .. .	3.07
No. of houses erected during 1941 :—		
By Local Authority	.. .. .	112
By other bodies or persons	.. .. .	102
		214

## CHIEF CAUSES OF DEATH, 1937-1941.

	1937	1938	1939	1940	1941
Tuberculosis of the Lungs .. .. .	664	620	598	685	702
Tuberculosis (other forms) .. .. .	119	105	103	83	119
Diseases of the Heart .. .. .	1944	1781	1922	2311	2047
Cerebral Haemorrhage, Apoplexy, Hemiplegia	277	327	297	333	359
Pneumonia .. .. .	715	582	411	554	552
Bronchitis .. .. .	452	321	422	929	509
Digestive Organs .. .. .	399	365	348	336	311
Atrophy, Debility (Chiefly in Infants) .. ..	17	29	31	28	27
Old Age .. .. .	662	582	592	570	565
Premature Birth .. .. .	213	192	161	165	195
Nephritis and Bright's Disease .. .. .	233	240	264	260	236
Convulsions .. .. .	36	38	31	35	58
Inflammation of the Brain .. .. .	16	17	17	29	21
Diarrhoea and Dysentery .. .. .	81	87	74	97	158
Measles .. .. .	45	57	—	27	22
Scarlet Fever .. .. .	9	9	1	1	4
Whooping Cough .. .. .	53	14	28	6	66
Diphtheria .. .. .	90	54	35	47	47
Influenza .. .. .	304	85	155	225	116
Malignant Disease.. .. .	1247	1286	1221	1254	1299



Estimated Populations. Annual Rates of Marriages, Births, and Deaths (a) from all Causes, (b) from Specified Causes, and (c) Infantile Mortalities; also the Percentages to Total Deaths of Inquest Cases and of Deaths in Public Institutions; also Quinquennial Averages, 1871-1941.

Year	Estimated Population (Mean)	Marriage Rate per 1,000 persons living	Annual Rates per 1,000 persons living										Percentage to Total Deaths		Infantile Mortality	Year			
			Births	Deaths (all causes)	Smallpox	Measles	Scarlet Fever	Diphtheria	Whooping Cough	Typhus Fever	Enteric Fever	Simple Continued Fever	Diarrhoeal Diseases	Violence			Inquest Cases	Deaths in Public Institutions	
Quinquennial Average	1871-1875	477,344	24.6	38.9	28.3	0.26	0.64	1.08	0.08	0.78	0.14	0.43	0.21	1.95	0.94	7.2	13.4	198	1871-1875
	1876-1880	509,802	18.6	38.7	26.2	0.24	0.53	1.07	0.13	0.84	0.08	0.29	0.11	1.26	0.89	7.5	14.3	172	1876-1880
	1881-1885	542,746	17.9	35.1	23.6	0.04	0.71	0.48	0.10	0.68	0.05	0.20	0.03	0.99	0.72	7.0	15.9	175	1881-1885
	1886-1890	575,630	16.6	33.4	24.6	0.02	0.83	0.50	0.32	0.54	0.02	0.30	0.01	1.08	0.78	6.9	17.7	183	1886-1890
	1891-1895	517,801	16.9	33.2	23.6	0.03	0.62	0.26	0.27	0.64	0.00	0.24	0.01	1.19	0.77	7.1	19.2	186	1891-1895
	1896-1900	539,599	18.2	32.5	22.7	..	0.89	0.20	0.13	0.53	0.00	0.18	0.01	1.69	0.73	7.1	20.2	192	1896-1900
	1901-1905	554,355	17.4	30.9	20.1	0.01	0.55	0.19	0.22	0.41	0.00	0.13	0.00	1.15	0.72	7.1	24.4	173	1901-1905
	1906-1910	660,049	17.0	28.1	17.7	..	0.54	0.16	0.17	0.37	0.00	0.10	0.00	0.76	0.68	7.4	27.3	147	1906-1910
	1911-1915	731,677	17.6	24.8	16.4	..	0.50	0.12	0.14	0.25	..	0.05	..	0.84	0.67	7.9	30.8	133	1911-1915
	1916-1920	770,330	16.7	19.2	14.1	..	0.24	0.04	0.08	0.21	..	0.02	0.00	0.30	0.49	6.4	32.3	105	1916-1920
	1921-1925	751,288	16.8	20.6	13.9	..	0.25	0.06	0.10	0.20	..	0.01	..	0.33	0.44	5.7	37.8	95	1921-1925
	1926-1930	759,570	17.3	17.4	13.8	..	0.18	0.02	0.11	0.14	..	0.01	..	0.24	0.46	4.8	42.9	88	1926-1930
1931-1935	771,182	16.8	15.0	13.1	..	0.11	0.02	0.10	0.08	..	0.00	..	0.15	0.46	5.0	48.5	77	1931-1935	
1936-1940	729,613	20.6	14.8	13.8	..	0.07	0.01	0.09	0.04	..	0.00	..	0.11	0.59	4.8	52.0	71	1936-1940	
1937 .. 1938 .. 1939 .. 1940 .. *1941 ..	751,371	19.1	14.3	13.5	..	0.06	0.01	0.12	0.07	..	0.00	..	0.11	0.44	4.3	53.9	76	..	1937
	747,318	17.9	14.8	12.4	..	0.07	0.01	0.07	0.02	..	0.00	..	0.12	0.45	4.9	53.8	69	..	1938
	736,318	20.9	14.1	12.8	..	..	0.00	0.05	0.04	..	0.00	..	0.10	0.60	5.6	51.8	61	..	1939
	654,000	27.5	15.9	16.9	..	0.04	0.00	0.07	0.01	..	0.00	..	0.15	1.01	4.7	47.9	70	..	1940
	621,298	22.7	15.6	16.3	..	0.03	0.01	0.07	0.10	..	0.00	..	0.25	1.16	5.6	49.5	86	..	1941

The populations and rates prior to 1891 are those for the Unions of Manchester, Chorlton and Prestwich, which have been taken as approximately representing "Manchester." The City was extended to include Moss Side and Withington in 1904, Gorton and Levenshulme in 1909 and Wythenshawe in 1931.

\* The population for calculating the death rates for 1941 = 631,090, as the facts for this year are for 53 weeks.

## ANNUAL RATES OF MORTALITY FROM CERTAIN CAUSES OF DEATH.

YEAR	ANNUAL RATES PER 1,000 PERSONS LIVING										RATES PER 1,000 BIRTHS	
	Cancer	Tuberc. Peritonitis Tabes Mes.	Phthisis	Other Tuberc. Diseases	Diseases of Nervous System	Diseases of Heart and Blood Vessels	Diseases of Respiratory System	Diseases of Digestive System	Diseases of Urinary System	Diseases of Generative System	Puerperal Fever	Childbirth
31-1885 ..	0.50	0.35	2.42	0.57	3.28	1.37	5.41	1.23	0.48	0.08	3.03	1.99
36-1890 ..	0.64	0.36	2.24	0.59	3.09	1.73	5.76	1.23	0.61	0.08	3.22	2.13
91-1895 ..	0.62	0.22	2.09	0.75	1.74	2.53	5.56	1.07	0.52	0.07	2.75	3.42
96-1900 ..	0.73	0.19	2.04	0.63	1.32	2.54	5.03	1.04	0.49	0.09	1.55	1.51
01-1905 ..	0.80	0.16	1.94	0.55	1.17	2.56	4.29	0.95	0.49	0.08	1.21	1.76
06-1910 ..	0.88	0.14	1.65	0.45	0.95	2.56	3.75	0.84	0.54	0.07	1.28	1.49
1-1915 ..	1.01	0.12	1.59	0.38	0.79	2.34	3.45	0.68	0.56	0.09	1.24	2.14
6-1920 ..	1.08	0.09	1.39	0.28	0.54	2.27	2.98	0.51	0.47	0.06	1.58	1.82
11-1925 ..	1.34	0.06	1.26	0.24	0.51	2.58	3.03	0.47	0.46	0.07	1.54	2.04
16-1930 ..	1.45	0.03	1.16	0.19	0.48	3.05	2.66	0.45	0.50	0.07	1.74	2.80
21-1935 ..	1.61	0.02	1.00	0.13	0.41	3.68	1.95	0.46	0.48	0.05	*1.47	*2.40
26-1940 ..	1.72	0.01	0.89	0.13	0.38	4.42	1.71	0.50	0.52	0.06	1.14	2.68
6.. ..	1.62	0.02	0.87	0.12	0.39	4.10	1.83	0.50	0.49	0.07	1.69	3.29
7.. ..	1.66	0.01	0.88	0.15	0.36	4.12	1.69	0.53	0.48	0.07	1.34	2.85
8.. ..	1.72	0.01	0.83	0.13	0.35	3.98	1.32	0.49	0.47	0.06	1.39	2.86
9.. ..	1.66	0.02	0.81	0.12	0.38	4.32	1.24	0.47	0.57	0.07	0.83	2.48
0.. ..	1.92	0.01	1.05	0.11	0.43	5.60	2.45	0.51	0.61	0.04	0.46	1.93
1.. ..	2.06	0.01	1.11	0.17	0.46	5.17	2.40	0.49	0.62	0.05	1.07	1.76

\* From the Year 1931 the Maternal Mortality rates are calculated on per 1,000 births (Live and Still births).

PUBLIC VACCINATION.

There are 26 public vaccinators and 4 vaccination officers.  
The percentage of infants successfully vaccinated in Manchester was 52·19 in 1940.  
The percentages for the last five years were :—

Year	England and Wales	Manchester
	%	%
1936 .. .. .	34·9	51·57
1937 .. .. .	34·0	50·67
1938 .. .. .	*	50·61
1939 .. .. .	*	48·77
1940 .. .. .	*	52·19

\* No figures available.

The following is a summary of the return made to the Ministry of Health of vaccinations for the year 1940 † :—

	Total	Percentage
Number of successful vaccinations .. .. .	5,477	52·19
Number insusceptible of vaccination .. .. .	90	0·86
Number of exemptions .. .. .	2,691	25·64
Number died unvaccinated .. .. .	645	6·14
Number not traceable : removed to other districts or postponed .. .. .	1,592	15·17
Number of children born .. .. .	10,495	100·00

†Returns for vaccination are always for the year preceding the year covered by this report. This is unavoidable, since the period of four months from the date of birth is allowed for exemption purposes.



## NOTIFIABLE INFECTIOUS DISEASES OTHER THAN TUBERCULOSIS.

The following cases were notified in 1941, and the numbers are compared with the average of the previous ten years :—

	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Mean	1941
Smallpox .. .. .	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever .. .. .	2,913	2,283	1,773	2,080	2,795	2,402	2,578	2,396	1,258	722	<b>2,120</b>	831
Diphtheria .. .. .	573	885	732	866	903	1,202	1,397	1,193	799	716	<b>927</b>	770
Typhus Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..
Typhoid Fever .. .. .	24	39	14	14	20	15	7	6	28	59	<b>18</b>	2
Paratyphoid Fever .. .. .	..	..	..	..	..	..	..	..	..	8	<b>6</b>	57
Relapsing Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever .. .. .	139	96	128	107	132	106	71	} <sup>a</sup> 223	206	169	<b>211</b>	171
Puerperal Pyrexia .. .. .	80	76	77	119	122	136	123					
Erysipelas .. .. .	399	334	377	363	408	370	341	404	259	222	<b>348</b>	198
Ophthalmia Neonatorum .. .. .	119	108	107	122	140	122	116	132	137	140	<b>124</b>	120
Cerebro-Spinal Fever .. .. .	38	27	45	40	49	62	50	43	30	175	<b>56</b>	197
Poliomyelitis.. .. .	4	5	8	14	7	29	1	9	26	7	<b>11</b>	21
Polio-Encephalitis .. .. .	..	..	3	2	1	2	1	1	..	1	<b>1</b>	12
Encephalitis-Lethargica .. .. .	24	9	3	6	4	..	5	4	..	1	<b>6</b>	1
Malaria .. .. .	1	1	..	..	2	2	..	..	..	..	<b>1</b>	..
Dysentery .. .. .	6	2	..	3	7	1	6	46	13	112	<b>20</b>	61
Primary Pneumonia .. .. .	2,005	2,047	1,734	1,496	2,105	1,973	1,969	1,543	1,084	1,895	<b>1,785</b>	1,554
Influenzal Pneumonia .. .. .	480	321	793	178	375	240	458	103	194	179	<b>332</b>	121
Measles .. .. .	7,771	12,238	6,350	11,383	9,907	8,807	6,550	9,949	574	14,819	<b>8,835</b>	3,852
Rubella .. .. .	2,553	1,687	334	342	1,180	866	824	375	739	3,543	<b>1,244</b>	2,777
Pemphigus Neonatorum .. .. .	64	46	41	33	25	36	43	48	33	37	<b>41</b>	29
Whooping Cough.. .. .	..	..	..	..	..	..	..	..	..	668	..	4,689
	17,193	20,204	12,519	17,168	18,173	16,371	14,540	16,475	5,380	23,473	<b>16,086</b>	15,463

In 1900 Erysipelas was made notifiable, in 1910 Ophthalmia Neonatorum, in 1912 Cerebro-Spinal Fever and Poliomyelitis. Measles and Rubella were made notifiable in Manchester 1916, and Polio-Encephalitis, Encephalitis-Lethargica, Malaria, Dysentery, Primary Pneumonia, Influenzal Pneumonia in 1919, in 1925 Pemphigus Neonatorum.

Puerperal Pyrexia was made notifiable on October 1st, 1926.

<sup>a</sup> The Public Health Act 1936 provides that Puerperal Pyrexia includes the obligation to notify conditions at present notifiable as Puerperal Fever as from October 1st, 1937.

The Puerperal Pyrexia Regulations, 1939, replace the term "Puerperal Fever" by the term Puerperal Pyrexia as from 1st April, 1939.

Measles and Whooping Cough were made compulsorily notifiable February, 1940. German Measles is notifiable under the Manchester German Measles Regulations, 1920.

The deaths from the more common diseases are shown in the following figures :—

Years	Measles	Scarlet Fever	Diphtheria	Enteric Fever	Influenza	Whooping Cough	Diarrhoea	Phthisis
1931-40 average	68	10	68	2	227	44	99	710
1941	22	4	47	..	116	66	158	702

## IMMUNISATION AGAINST DIPHTHERIA.

A circular was issued on 7th December, 1940, by the Ministry of Health, requesting all local authorities to make special efforts to secure the immunisation of as many children as possible of both pre-school and school age. A stock of Alum Precipitated Toxoid was made available, free of charge, to local authorities by the Ministry.

An intensive effort was inaugurated and immediately approved by the City Council. Full co-operation was given by the Education Committee. The widest publicity was obtained by means of posters, leaflets, exhibition of films, addresses to head teachers and parents, talks in child welfare centres, and by circulars to medical practitioners inviting their co-operation.

Immunisation has been effected at schools, child welfare centres, special clinics in the Public Health Department and by private medical practitioners.

Due acknowledgment is made here of the very great and willing help given by both professional and lay staffs of the Education and Public Health Departments, and in particular acknowledgment is made of the great amount of work done by the Women's Voluntary Service for a period of six months without which the immense volume of clerical work necessary could not have been covered. The following tables show the results of the campaign.

### Number of Persons dealt with in 1941.

	Numbers having received complete course of prophylactic treatment	Numbers having received incomplete course of prophylactic treatment
Schools .. .. .	10,190	6,430
Child Welfare Centres .. .. .	5,387	55
Day Nurseries .. .. .	41	—
Public Health Office .. .. .	464	84
General Practitioners .. .. .	283	11
Hospitals .. .. .	278	143
Shelters .. .. .	59	5
Total .. .. .	16,702	6,728

### Children under Five Years of Age Immunised in 1941.

	Complete Course	Incomplete Course
Schools .. .. .	1,183	1,138
Welfare Centres .. .. .	5,176	48
Day Nurseries .. .. .	41	—
Public Health Office .. .. .	124	10
General Practitioners .. .. .	163	8
Hospitals .. .. .	88	59
Shelters .. .. .	21	3
Total .. .. .	6,796	1,266



## CEREBRO-SPINAL FEVER.

197 cases of cerebro-spinal fever were notified and accepted as such in 1941, the diagnosis being confirmed bacteriologically in 183 of them. The cases were widely spread over the city and no particular focus of infection was evident.

There were 33 deaths from this disease, giving a case mortality rate of 16.8 per cent., which compares with a rate of 28.6 per cent. in 1940.

As regards seasonal prevalence, 73 cases occurred in the first quarter of the year, 64 in the second, 34 in the third, and 26 in the last quarter.

## ENTERIC FEVER.

66 notifications of enteric fever were received in 1941, seven of which related to cases in which the diagnosis was subsequently amended. Thus 59 persons contracted the disease, and of these 2 were infected by *B. typhosus* and 57 by *B. paratyphosus* B.

### *Sources of Infection.*

The bulk of infections occurred during July and August, about the time when epidemics of paratyphoid were occurring in other parts of the country, due to the consumption of synthetic cream which had become contaminated at its place of manufacture. Close investigation suggested that one of several brands of cream which were being used in Manchester was responsible for a considerable number of the cases which were occurring in the city. From the facts collected, however, and in view of the negative bacteriological results of examination of samples it was not possible to adduce decisive evidence that synthetic cream was the responsible disseminating agent.

## MONSALL HOSPITAL.

At the close of the year 1940, 285 patients remained in hospital. During 1941, 3,465 were admitted. The total number under treatment during the year, therefore, was 3,750. There were 169 deaths and 3,264 were discharged cured.

317 remained in hospital at the end of the year.

The largest total number of cases admitted to hospital was during the month of May, when 347 cases were received. The maximum number of patients in hospital was 347 on December 1st, and the minimum number was 244 on March 6th, 1941.

The average daily number of patients in hospital for the year was 282.6, as against 242.05 in the year 1940.

The average duration of stay for each patient was 29.8 days, as against 27.8 in 1940.

The fatality rate for all cases under treatment was 4.9 per cent., as compared with 3.6 during 1940.

In 646 cases, or 18.8 per cent., the diagnosis was altered from the certified disease.

### Scarlet Fever.

55 cases remained in hospital at the end of the previous year, and during the year 677 were admitted, showing an increase of 57 on the previous year. The number of discharges was 631 and there were no deaths.

The average stay in hospital was 29.6 days, showing an increase of 2.3 days on the previous year.

### Diphtheria.

The number of patients admitted certified as diphtheria was 987 as against 917 in 1940, showing an increase of 70. The total number under treatment was 1,115. There were 907 discharges and 41 deaths; 12 deaths occurred within 48 hours of admission. The gross fatality rate was 4.3 per cent., as against 5.2 during the previous year, or 3.1 excluding the 12 deaths referred to.

84 cases out of the total were diagnosed as diphtheria carriers; excluding these carrier cases the fatality rate was 4.7.

The average stay in hospital of the patients who recovered was 43.8 days, and for fatal cases 7.5 days.

192 cases certified as diphtheria were found to be suffering from some other disease; of these cases 2 proved fatal.



**Enteric Fever Group.**

In hospital at commencement of year .. .. .	3
Admitted during year .. .. .	106
Incorrectly diagnosed .. .. .	14
Remaining in hospital at end of year .. .. .	0
Discharged .. .. .	92
Died .. .. .	3
Average day of disease on admission .. .. .	11th
Average stay in hospital .. .. .	38 days
Average age of patients .. .. .	19.8 years
The type of disease in the cases diagnosed as enteric fever was :—	

	Cases	Recovered	Died
Typhoid .. .. .	5	4	1
Paratyphoid B. .. .. .	90	88	2

**Erysipelas.**

91 cases were admitted and 92 cases were discharged.

1 death occurred giving a mortality rate of 1.1 per cent., as against 0.9 per cent. in the previous year.

The striking fall in the mortality of erysipelas following the introduction of treatment with sulphonamide continues.

**Measles.**

141 cases of measles were admitted and 179 were discharged. 3 deaths occurred, giving a case mortality rate of 1.6 per cent. 21 cases were complicated by broncho-pneumonia. 2 deaths were due to this cause and 1 to encephalitis.

**Whooping Cough.**

316 cases of whooping cough were admitted as against 19 in the previous year. There were 37 deaths, giving a death rate of 11.7 per cent., as against 10.5 per cent. in 1940.

**Cerebro-Spinal Fever.**

153 cases of meningococcal meningitis were treated during the year. Of these 20 died and 133 recovered, giving a fatality rate of 13.1 per cent. 10 patients died within 48 hours of admission and, excluding these, the fatality rate from this disease was 6.9 per cent.

	No. of Cases	Male	Female	Died	Re-covered	Total	Case Mortality per cent. (excluding Deaths in 48 hours)
Under 1 year ..	8	4	4	2	6	25.0	—
1 to 5 years ..	25	13	12	6	19	24.0	9.5
5 „ 10 „ ..	17	7	10	2	15	11.8	11.8
10 „ 20 „ ..	25	20	5	2	23	8.0	4.2
20+ .. .. .	78	39	39	8	70	10.3	6.7
	153	83	70	20	133	13.1	6.9

Average day of disease on admission to hospital :—

Recoveries : 4th.

Deaths : 5th.

Average day of disease on which death occurred : 7th.

### Puerperal Infection.

At the beginning of the year 1 patient was still under treatment in the unit. During the year 159 patients were admitted for treatment of abnormal conditions arising in the puerperium or in association with abortion—51 of these arose in connection with abortion—140 were discharged and 6 were transferred for treatment to other wards or hospitals. 9 patients were still in hospital at the end of the year. There were 5 deaths.

### Tuberculosis.

Owing to difficulty experienced in finding accommodation for cases of tuberculosis a ward was opened during 1941 for this disease. 34 patients suffering from pulmonary tuberculosis were admitted. A few of these were admitted pending transfer to sanatoria. The majority were cases of advanced phthisis, unsuitable for sanatorium treatment, but requiring medical and nursing attention. 26 patients were discharged or transferred, and 8 succumbed to the disease.

### Numbers of Various Diseases Treated.

	In Hospital, 1st Jan., 1941	Admitted	Discharges and Deaths	Remaining in Hospital, 31st Dec., 1941
Scarlatina .. .. .	55	677	631	101
Diphtheria and Diphtheria Carriers..	128	987	948	167
Enteric Fever Group .. .. .	3	92	95	..
Erysipelas .. .. .	5	91	93	3
Puerperal Fever and Pyrexia .. ..	1	159	151	9
Measles .. .. .	48	141	182	7
Other Diseases .. .. .	45	1,318	1,333	30
	285	3,465	3,433	317

## GENERAL HOSPITALS AND INSTITUTIONS.

## General Statistics for the Year ended 31st December, 1941.

[illegible]



**Duration Length of Stay of Patients in Municipal General Hospitals during  
the Last Ten Years.**

YEAR	BOOTH HALL			CRUMPSALL			WITHINGTON		
	Under 4 weeks	4 to 13 weeks	Over 13 weeks	Under 4 weeks	4 to 13 weeks	Over 13 weeks	Under 4 weeks	4 to 13 weeks	Over 13 weeks
1932 ..	3,210	1,621	574	7,973	2,771	871	8,557	2,772	724
1933 ..	3,027	1,426	491	9,658	1,855	856	9,183	2,954	796
1934 ..	2,990	1,388	501	8,958	2,110	501	10,712	2,442	589
1935 ..	3,562	1,366	434	8,719	2,251	439	10,920	2,632	642
1936 ..	3,847	1,402	425	9,544	2,473	489	11,679	2,605	630
1937 ..	4,733	1,520	308	12,333	2,462	454	11,684	2,423	534
1938 ..	4,568	1,285	280	12,813	2,200	462	11,748	2,481	598
1939 ..	3,401	1,089	307	10,361	1,892	485	10,760	2,108	544
1940 ..	3,064	932	203	7,917	2,014	473	7,679	2,042	353
1941 ..	3,114	802	241	7,760	1,680	449	7,564	1,610	411

### TUBERCULOSIS.

The general death rate has not reached the high level of 1940, and in particular the respiratory diseases, excluding tuberculosis, were less fatal. The tuberculosis deaths follow the upward tendency seen throughout the country.

#### Notification.

The notification rate for all forms of tuberculosis in 1941 is 2·07 per 1,000 population, an increase of ·13 upon the figure for 1940. The pulmonary rate has increased by ·1 and the non-pulmonary by ·03.

##### *Pulmonary Tuberculosis.*

There was an increase in male notifications of 32, the age groups mostly affected being 1—4, 20—34, and 55—64.

In females there was a diminution in notifications of 8, the only age group showing a significant increase was 15—19. There was a marked fall in the 20—34 age groups.

##### *Non-Pulmonary Tuberculosis.*

The small increase in these notifications does not show any significant features in regard to age groups, but it may be noted that the 1—4 years age group has given the largest addition.

#### Mortality.

The death rate this year for all forms of tuberculosis is 1·3 per 1,000, being made up of 1·11 for pulmonary tuberculosis and ·19 for the non-pulmonary form.

##### *Pulmonary Tuberculosis.*

The male deaths were 1 less than in 1940, the age groups showing increases being those from 55 upwards. The female deaths increased by 18, the 15—24 group being the most adversely affected. A smaller increase is also noted in the 55 and upwards groups.

##### *Non-Pulmonary Tuberculosis.*

Both males and females show an increase here of 18 in each case. The 1—4 is the most significant age group at which increased deaths have occurred in both sexes.

It is to be noted in reviewing the above figures that the population is again estimated to have declined by nearly 33,000 since 1940.

The statistics for the year are set out in the following tables :—

**TABLE I.**

*Rates per Thousand of the Population.*

**Comparative Figures.**

	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
<b>DEATH RATES :—</b>													
General .. .. .	15·51	13·07	13·86	13·03	13·41	12·24	12·91	13·50	13·52	12·35	12·76	16·86	16·25
All respiratory diseases (except tuberculosis) .. .. .	3·25	2·10	2·59	1·98	1·97	1·47	1·73	1·83	1·70	1·32	1·24	2·45	1·80
Tuberculosis (all forms) .. .. .	1·40	1·37	1·29	1·17	1·15	1·13	1·04	1·01	1·04	·97	·95	1·17	1·30
Phthisis, both sexes .. .. .	1·21	1·15	1·12	1·00	1·00	·97	·92	·87	·88	·83	·81	1·05	1·11
„ males only .. .. .	1·54	1·41	1·43	1·23	1·25	1·32	1·17	1·09	1·10	1·04	1·04	1·39	1·44
„ females only .. .. .	·91	·91	·82	·79	·78	·66	·69	·67	·69	·64	·61	·74	·82
Non-pulmonary tuberculosis, both sexes .. .. .	·19	·22	·17	·16	·15	·16	·12	·14	·16	·14	·14	·12	·19
<b>TUBERCULOSIS NOTIFICATION RATES :—</b>													
All forms .. .. .	2·28	2·23	2·32	1·93	1·80	1·79	1·69	1·65	1·90	1·67	1·63	1·94	2·07
Pulmonary only .. .. .	1·79	1·64	1·67	1·41	1·40	1·39	1·30	1·26	1·40	1·27	1·24	1·54	1·64
Non-pulmonary only .. .. .	·48	·59	·65	·52	·40	·40	·40	·39	·50	·40	·39	·40	·43

**TABLE 2.**

**New Cases and Deaths during 1941.**

Age Periods	New Cases				Deaths			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
0	3	..	3	..	..	..	2	1
1	12	3	24	23	2	3	22	13
5	4	6	20	20	1	3	4	5
10	16	14	17	17	1	3	2	6
15	55	93	21	19	21	42	6	8
20	66	70	11	13	21	46	4	5
25	124	82	19	26	60	65	6	7
35	108	55	12	9	73	44	5	5
45	129	35	4	7	94	27	4	4
55	96	20	2	..	106	25	5	2
65 and upwards	32	13	2	4	49	16	..	3
Totals ..	645	391	135	138	428	274	60	59

The number of non-notified deaths from pulmonary tuberculosis was 16 = 2·27 per cent.

The number of non-notified deaths from non-pulmonary tuberculosis was 18 = 15·1 per cent., but it is to be noted that 7 of the 18 cases were certified as cases of tubercular meningitis. These cases as a rule have a very short illness, and diagnosis is frequently in doubt during life.

The percentage of non-notified deaths from all forms of tuberculosis was 4·14.

There were, in addition, 7 deaths of non-notified cases outside Manchester which were adjudged by the Registrar-General to be properly referable to this area.



TABLE 3.  
Primary Notifications and Deaths from Pulmonary Tuberculosis, 1917—1941.

Pulmonary Tuberculosis	0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—	Total	
												Notifications	Deaths
Notifications, 1917—1931 Deaths, "	70 52	478 177	1288 131	1317 274	2348 1297	2597 1552	4489 2642	4320 2979	3559 2954	1802 1551	617 574	22885	14183
Notifications, 1932 Deaths, "	1 2	24 17	32 2	28 10	146 52	158 114	234 151	194 136	172 167	74 91	24 28	1087	770
Notifications, 1933 Deaths, "	3 2	11 4	17 3	27 7	125 68	170 105	253 159	176 161	188 146	85 95	26 23	1081	773
Notifications, 1934 Deaths, "	.. 4	9 7	19 6	40 6	127 49	170 107	228 146	172 141	164 152	104 98	40 35	1073	751
Notifications, 1935 Deaths, "	3 3	9 2	35 7	31 4	106 56	151 93	209 152	185 122	167 155	89 81	21 36	1006	711
Notifications, 1936 Deaths, "	1 1	6 3	17 5	34 12	104 59	167 84	202 129	174 130	132 120	106 100	32 28	975	671
Notifications, 1937 Deaths, "	2 1	12 6	28 2	21 2	130 58	149 77	219 126	180 128	150 114	117 100	47 50	1055	664
Notifications, 1938 Deaths, "	6 1	8 3	27 2	30 7	116 46	146 78	192 128	152 95	134 126	104 104	32 30	947	620
Notifications, 1939 Deaths, "	3 1	8 2	19 ..	22 4	125 53	132 73	174 131	169 98	116 100	101 101	41 35	910	598
Notifications, 1940 Deaths, "	5 2	5 2	14 1	21 5	145 64	136 56	216 144	171 149	156 118	98 91	45 53	1012	685
Notifications, 1941 Deaths, "	3 ..	15 5	10 4	30 4	148 63	136 67	206 125	163 117	164 121	116 131	45 65	1036	702
Total Notifications Total Deaths	97 69	585 228	1506 163	1601 335	3620 1865	4112 2406	6622 4033	6056 4256	5102 4273	2796 2543	970 957	33067	21128



TABLE 4.

## Primary Notifications and Deaths from Non-Pulmonary Tuberculosis, 1917—1941.

Non-pulmonary Tuberculosis	0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—	Total	
												Notifications	Deaths
Notifications, 1917—1931 Deaths, "	245 300	1574 913	1790 371	1437 325	1092 325	615 198	665 228	400 180	305 157	184 106	114 79	8421	3182
Notifications, 1932 .. .. Deaths, " .. ..	6 7	69 38	86 20	49 10	55 12	33 7	45 10	30 4	18 8	8 5	3 5	402	126
Notifications, 1933 .. .. Deaths, " .. ..	6 7	46 26	70 13	41 6	33 18	33 7	35 13	27 11	13 7	8 3	1 3	313	114
Notifications, 1934 .. .. Deaths, " .. ..	7 9	52 24	64 15	43 11	37 14	30 14	39 15	21 12	11 6	6 3	3 2	313	125
Notifications, 1935 .. .. Deaths, " .. ..	3 3	45 18	56 9	45 6	31 8	27 12	49 8	23 14	13 8	9 8	6 1	307	95
Notifications, 1936 .. .. Deaths, " .. ..	4 7	50 21	57 15	49 9	38 14	33 12	29 8	13 4	14 10	11 7	3 2	301	109
Notifications, 1937 .. .. Deaths, " .. ..	9 5	53 23	67 10	43 10	66 12	36 11	45 13	26 9	8 6	14 13	9 7	376	119
Notifications, 1938 .. .. Deaths, " .. ..	10 8	41 17	51 13	47 10	42 8	27 7	39 12	18 7	15 12	6 4	7 7	303	105
Notifications, 1939 .. .. Deaths, " .. ..	4 3	46 24	40 9	34 7	46 14	29 12	36 9	23 6	15 5	10 8	6 6	289	103
Notifications, 1940 .. .. Deaths, " .. ..	3 4	29 17	47 9	30 2	42 10	27 7	31 9	18 5	17 10	10 4	6 6	260	83
Notifications, 1941 .. .. Deaths, " .. ..	3 3	47 35	40 9	34 8	40 14	24 9	45 13	21 10	11 8	2 7	6 3	273	119
Total Notifications Total Deaths .. ..	300 356	2052 1156	2368 493	1852 404	1522 449	914 296	1058 338	620 262	440 232	268 168	164 121	11558	4280

TABLE 5.

Primary Notifications of Pulmonary and Non-Pulmonary Tuberculosis  
received from Municipal Wards during 1941.

Wards	Pulmonary	Non-Pulmonary	Totals
1. Exchange .. ..	1	—	1
2. New Cross .. ..	39	10	49
3. St. Clement's .. ..	5	—	5
4. Oxford .. ..	5	—	5
5. St. John's .. ..	4	1	5
6. St. Ann's .. ..	—	—	—
7. St. Michael's .. ..	29	6	35
8. Collyhurst .. ..	17	4	21
9. Cheetham .. ..	38	4	42
10. Collegiate Church .. ..	14	4	18
11. Crumpsall .. ..	19	10	29
12. Blackley .. ..	42	15	57
13. Harpurhey .. ..	23	1	24
14. Moston .. ..	32	11	43
15. Newton Heath .. ..	30	14	44
16. Miles Platting .. ..	19	6	25
17. Bradford .. ..	40	12	52
18. Beswick .. ..	24	2	26
19. Ardwick .. ..	46	2	58
20. Openshaw .. ..	32	7	39
21. St. Mark's .. ..	39	9	48
22. Longsight .. ..	29	9	38
23. All Saints' .. ..	28	9	37
24. St. Luke's .. ..	41	18	59
25. Medlock Street .. ..	26	9	35
26. St. George's .. ..	24	10	34
27. Moss Side East .. ..	28	9	37
28. Moss Side West .. ..	39	5	44
29. Chorlton-cum-Hardy .. ..	62	11	73
30. Didsbury .. ..	34	8	42
31. Withington .. ..	57	12	69
32. Gorton North .. ..	35	7	42
33. Gorton South .. ..	40	8	48
34. Levenshulme .. ..	19	7	26
35. Rusholme .. ..	28	3	31
36. Wythenshawe .. ..	48	20	68
Total—City of Manchester..	1,036	273	1,309

**TABLE 6.**  
Sources of Notification of Tuberculosis during 1941.

Source	Pulmonary	Non-Pulmonary	Totals
Crumpsall Hospital ... ..	85	14	99
Withington Hospital .. ..	93	14	107
Booth Hall Hospital .. ..	40	48	88
District Medical Officers ..	1	—	1
Manchester Royal Infirmary	26	51	77
Ancoats Hospital .. ..	19	29	48
Skin Hospital .. ..	—	11	11
St. Mary's Hospital .. ..	1	4	5
Northern Hospital .. ..	4	4	8
Jewish Hospital .. ..	4	1	5
Pendlebury Hospital .. ..	2	13	15
Babies' Hospital .. ..	—	2	2
Hulme Dispensary .. ..	—	—	—
Gartside Street Dispensary..	3	7	10
Hardman Street Dispensary.	4	—	4
Asylums .. ..	32	5	37
Schools .. ..	—	2	2
Tuberculosis Staff .. ..	79	13	92
Naval, Military, and Air Force	86	7	93
Various Sources .. ..	53	12	65
Private Practitioners .. ..	494	30	524
Child Welfare Centres ..	—	—	—
Swinton House .. ..	—	—	—
Ear Hospital.. ..	—	—	—
Eye Hospital .. ..	—	—	—
Monsall Hospital .. ..	3	6	9
Ministry of Pensions .. ..	7	—	7
Total .. ..	1,036	273	1,309

222 tenants have allowed the removal of bedding, etc., for disinfection or destruction.

71,712 cardboard boxes have been prepared in the office and supplied to patients for use as sputum boxes in the home.

434 sputum bottles have been supplied for use outside the house.

12,802 visits have been made by the Enquiry Officers during the year.

36,697 letters were sent.

716 notices warning against spitting on floors, etc., have been supplied to offices and workshops.



TABLE 7.

Sources of Primary Notification of Non-Pulmonary Cases for the Years  
1918 to 1941.

Source	1918- 1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
Crumpsall Hospital .. .. .	294	19	10	15	8	16	41	20	19	24	14
Vithington Hospital .. .. .	262	13	7	13	27	23	26	32	22	19	14
Booth Hall Hospital .. .. .	676	59	35	38	21	39	48	42	37	31	48
Outside District Medical Officers .. .. .	7	..	1	..	..	..	1	1	..	..	..
Royal Infirmary .. .. .	1247	78	59	55	77	51	58	38	49	44	51
ancoats Hospital .. .. .	629	21	18	19	16	17	57	29	33	11	29
kin Hospital .. .. .	552	28	24	18	16	11	13	8	20	14	11
St. Mary's Hospital .. .. .	163	..	1	7	9	6	6	7	3	7	4
Northern Hospital .. .. .	120	11	2	3	8	12	..	1	4	8	4
ewish Hospital .. .. .	78	1	..	1	..	2	1	2	1	3	1
Pendlebury Hospital .. .. .	147	15	13	12	11	13	17	9	11	6	13
Babies' Hospital .. .. .	12	3	8	2	..	1	3	2	2	..	2
Fulme Dispensary .. .. .	4	..	..	..	1	..	..	..	1	..	..
artside Street Dispensary .. ..	530	20	9	9	5	12	8	12	5	9	7
Hardman Street Dispensary ..	225	1	..	..	..	..	..	..	..	..	..
owdon Hospital .. .. .	8	..	..	..	..	..	..	..	..	..	..
Asylums .. .. .	36	..	1	..	..	..	..	..	1	1	5
Schools .. .. .	274	27	24	16	5	3	3	4	2	3	2
uberculosis Office Staff .. ..	178	18	20	14	10	14	24	9	7	18	13
aval and Military .. .. .	33	1	1	1	..	1	..	3	1	4	7
arious Sources .. .. .	236	16	11	16	15	14	14	19	20	24	12
Private Practitioners .. .. .	1894	70	69	74	76	64	53	61	47	31	30
Child Welfare Centres .. .. .	2	1	..	..	2	..	..	..	..	..	..
ar Hospital .. .. .	..	..	..	..	..	1	..	..	..	..	..
ye Hospital .. .. .	..	..	..	..	..	1	..	..	..	..	..
Winton House .. .. .	11	..	..	..	..	..	..	..	..	..	..
onsall Hospital .. .. .	..	..	..	..	..	..	3	4	4	3	6
Total .. .. .	7618	402	313	313	307	301	376	303	289	260	273

TABLE 8.

Number of New Cases of Pulmonary Tuberculosis Notified during the Years  
1900 to 1941.

Year					Poor-law Cases	Institutions, etc.	Private Practitioners	Total
(1)	1900*	..	..	.	578	455	540	1,573
	1901	..	..	..	625	373	341	1,339
	1902	..	..	..	667	305	303	1,275
	1903	..	..	..	556	550	251	1,357
	1904	..	..	..	512	440	250	1,202
	1905	..	..	..	527	588	291	1,406
	1906	..	..	..	565	510	304	1,379
	1907	..	..	..	634	646	310	1,590
(2)	1908	..	..	..	659	498	346	1,503
	1909	..	..	..	681	542	384	1,607
	1910	..	..	..	543	760	356	1,659
(3)	1911	..	..	..	517	897	423	1,837
(4)	1912	..	..	..	488	947	969	2,404
(5)	1913	..	..	..	345	717	1,350	2,412
	1914	..	..	..	483	877	1,304	2,664
	1915	..	..	..	279	740	1,194	2,213
	1916	..	..	..	322	817	1,410	2,549
	1917	..	..	..	470	716	1,061	2,247
	1918	..	..	..	268	563	1,015	1,846
	1919	..	..	..	208	538	845	1,591
	1920	..	..	..	206	629	672	1,507
	1921	..	..	..	257	632	722	1,611
	1922	..	..	..	233	567	656	1,456
	1923	..	..	..	239	546	659	1,444
	1924	..	..	..	223	555	731	1,509
	1925	..	..	..	262	496	746	1,504
	1926	..	..	..	220	422	765	1,407
	1927	..	..	..	241	441	756	1,438
	1928	..	..	..	253	361	824	1,438
	1929	..	..	..	201	382	802	1,385
	1930	..	..	..	201	377	709	1,287
					<i>Transferred Hospitals</i>			
	1931	..	..	..	206	362	717	1,285
	1932	..	..	..	202	228	657	1,087
	1933	..	..	..	205	213	663	1,081
	1934	..	..	..	242	197	634	1,073
	1935	..	..	..	218	202	586	1,006
	1936	..	..	..	208	192	575	975
	1937	..	..	..	233	275	547	1,055
	1938	..	..	..	249	202	496	947
	1939	..	..	..	223	227	460	910
	1940	..	..	..	241	275	496	1,012
	1941	..	..	..	218	324	494	1,036
Total .. ..					14,908	20,584	27,614	63,106

\* This table does not include 425 cases notified in 1899.

(1). Voluntary notification of Pulmonary Tuberculosis—Manchester scheme.

(2). Compulsory notification (Tuberculosis Regulations) from Poor Law institutions.

(3). Compulsory notification from voluntary institutions.

(4). Compulsory notification of Pulmonary Tuberculosis by all practitioners.

(5). Compulsory notification of all forms of Tuberculosis.

TABLE 9.

Number of New Cases of Non-Pulmonary Tuberculosis Notified  
during the Years 1913—1941.

Year	Total		Total
	Males	Females	
1913 .. .. .	759	714	1,473
1914 .. .. .	519	413	932
1915 .. .. .	422	415	837
1916 .. .. .	418	467	885
1917 .. .. .	433	449	882
1918 .. .. .	345	353	698
1919 .. .. .	206	228	434
1920 .. .. .	280	257	537
1921 .. .. .	295	281	576
1922 .. .. .	321	284	605
1923 .. .. .	350	380	730
1924 .. .. .	316	307	623
1925 .. .. .	322	300	622
1926 .. .. .	239	224	463
1927 .. .. .	277	226	503
1928 .. .. .	214	276	490
1929 .. .. .	204	171	375
1930 .. .. .	251	215	466
1931 .. .. .	259	237	496
1932 .. .. .	201	201	402
1933 .. .. .	154	159	313
1934 .. .. .	170	143	313
1935 .. .. .	146	161	307
1936 .. .. .	154	147	301
1937 .. .. .	184	192	376
1938 .. .. .	154	149	303
1939 .. .. .	143	146	289
1940 .. .. .	129	131	260
1941 .. .. .	135	138	273
Total .. ..	8,000	7,764	15,764



TABLE 10.

Tuberculosis (Non-Pulmonary).—Primary Cases Notified during 1941.—Age Groups and Site.

Location of Disease	Age Groups																Totals					
	0—		5—		10—		15—		20—		25—		35—		45—				55—		65—	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females			Males	Females	Males	Females
Brain :—Tumour	12	7	4	4	1	2	2	2	1	1	2	2	3	1	1	1	1	1	23	22		
Meninges	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Hydrocephalus	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Glands :—Cervical	4	3	5	8	10	10	5	6	2	2	5	7	1	2	..	3	1	1	32	45		
Mesenteric	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1		
Axillary	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1		
Inguinal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Tuberculous Peritonitis	2	..	2	2	1	1	2	2	1	2	..	..	..	..	..	..	..	8	6			
Tuberculosis of Abdomen	3	..	2	..	..	..	..	2	..	..	..	2	..	1	..	1	..	5	5			
"    of Breast	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1		
"    of Intestines	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Joints:—Spine	1	1	2	3	2	1	1	1	1	1	2	4	1	2	..	2	1	11	9			
Hip	1	1	2	..	2	1	3	2	1	1	..	..	1	..	..	1	1	10	8			
Elbow	1	..	..	..	1	..	1	..	1	..	..	..	..	..	..	..	..	2	2			
Ankle	1	..	..	..	3	..	1	..	..	..	..	1	..	..	..	..	..	4	4			
Wrist	..	..	..	..	1	..	3	..	..	..	..	1	..	..	..	..	..	1	1			
Shoulder	..	3	..	..	..	..	..	..	1	..	2	1	..	..	..	..	..	3	8			
Knee	1	..	1	1	3	..	..	2	..	..	1	1	2	1	..	..	..	8	6			
Bones :—Various	1	..	1	1	..	1	2	1	2	1	1	2	..	..	1	..	..	8	6			
Tuberculosis of Skin	..	2	1	..	..	..	..	..	..	2	3	5	3	..	..	..	1	7	10			
General Tuberculosis	..	5	..	..	..	..	..	..	..	1	1	1	..	..	..	..	1	2	7			
Special Organs :—Ear	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1			
Bladder, etc.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3			
Kidney	..	..	..	..	..	..	..	1	1	..	1	..	1	1	..	1	..	1	3			
Testicle, etc.	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	7	..			
Muscles, etc.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1			
Rectum	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..			
Uterus	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
Unclassified	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	1	1			
Totals	27	23	20	20	17	17	21	19	11	13	19	26	12	9	4	7	2	4	135	138		

TABLE 11.

Various Statistics Relating to the Notification of Tuberculosis.

	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931	1930	1929	1928	1914 to 1927	1899 Sept. 1st to 1913 Dec. 31st	Total
Cases Visited and Registered—																	
Males .. .. .	793	771	674	716	818	703	738	836	804	828	975	1014	1058	1106	20861	<i>Phthisis only</i> 14170	46865
Females .. .. .	539	541	544	561	630	586	584	598	622	723	806	806	809	919	15874	8854	33996
Totals .. .. .	1332	1312	1218	1277	1448	1289	1322	1434	1426	1551	1781	1820	1867	2025	36735	23024	80861
Houses Disinfected—																	
1. By Corporation—																	
(a) With solution of chlorinated lime only .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15582	9015	24597
(b) With lime solution only .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	126	126
(c) By Esmarch's method and solution of chlorinated lime .. .. .	1582	1837	1983	2107	2180	2361	2608	2866	2952	2991	3224	3115	2934	2693	12643	17232	29875
(d) † By fumigating lamp .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3846	..	39279
Totals .. .. .	1582	1837	1983	2107	2180	2361	2608	2866	2952	2991	3224	3115	2934	2693	32071	26373	93877
2. By Tenants—																	
Esmarch's method of chlorinated lime, etc. .. .. .	3571	4170	4283	4473	4583	4864	5108	5614	5791	5802	6342	7032	7192	6868	71811	36919	184423
Totals .. .. .	5153	6007	6266	6580	6763	7225	7716	8480	8743	8793	9566	10147	10126	9561	103882	63292	278300
Specimens of Sputum examined—																	
Positive .. .. .	615	649	693	649	683	769	846	1002	966	649	408	360	392	360	7193	6705	22939
Negative .. .. .	3377	3581	3511	3878	4060	4202	4809	4957	4734	3589	2236	2039	1698	1548	22242	12176	82637
Totals .. .. .	3992	4230	4204	4527	4743	4971	5655	5959	5700	4238	2644	2399	2090	1908	29435	18881	105576
Cases admitted to Hospital and Sanatoria .. .. .	2012	2157	2007	2204	2246	2239	2347	2368	2275	2038	2275	2033	1919	1948	29561	22669	82298
Notified from Common Lodging Houses	17	39	25	37	27	36	24	28	43	44	45	62	71	62	1638	3109	5307
Number of cases under observation ..	6421	6736	7034	7140	7558	7951	8271	8650	9017	9441	9759	10060	10197	10494	115694	33702 approx.	..

† Method commenced on 1st December, 1925.

TABLE 12.

Return showing the Work of the Clinic during the Year 1941.

Diagnosis	Pulmonary			Non-Pulmonary			Total			Grand Total
	Adults		Children	Adults		Children	Adults		Children	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	
A.—New cases examined during the year (excluding contacts)—										
(a) Definitely tuberculous .. .. .	505	295	28	17	49	62	554	357	73	1042
(b) Diagnosis not completed .. .. .	..	..	..	..	..	..	59	47	14	134
(c) Non-tuberculous .. .. .	..	..	..	..	..	..	765	459	98	1399
B.—Contacts examined during the year—										
(a) Definitely tuberculous .. .. .	7	13	1	1	..	..	7	13	4	27
(b) Diagnosis not completed .. .. .	..	..	..	..	..	..	3	10	12	38
(c) Non-tuberculous .. .. .	..	..	..	..	..	..	139	373	307	1106
C.—Cases written off the Dispensary Register as—										
(a) Recovered .. .. .	66	69	15	18	20	36	86	105	52	292
(b) Non-tuberculous .. .. .	..	..	..	..	..	..	904	832	405	2505
D.—Number of persons on Dispensary Register on December 31st—										
(a) Definitely tuberculous .. .. .	1766	1389	174	156	264	393	2030	1782	453	4680
(b) Diagnosis not completed .. .. .	..	..	..	..	..	..	62	57	26	172

Total number of cases of Tuberculosis who received Treatment from the Clinic .. .. 463

Total number of attendances at the Clinic .. .. . 17,453



TABLE 13—Insured Cases Applying for Treatment for the Years 1914—1941.

	Males	Females	Total
1914 .. .. .	730	321	1,051
1915 .. .. .	572	315	887
1916 .. .. .	747	316	1,063
1917 .. .. .	728	359	1,087
1918 .. .. .	642	261	903
1919 .. .. .	630	255	885
1920 .. .. .	645	250	895
1921 .. .. .	615	255	870
1922 .. .. .	543	265	808
1923 .. .. .	539	291	830
1924 .. .. .	597	371	968
1925 .. .. .	610	327	937
1926 .. .. .	562	368	930
1927 .. .. .	555	296	851
1928 .. .. .	612	372	984
1929 .. .. .	610	376	986
1930 .. .. .	551	352	903
1931 .. .. .	555	360	915
1932 .. .. .	451	323	774
1933 .. .. .	503	281	784
1934 .. .. .	471	284	755
1935 .. .. .	428	283	711
1936 .. .. .	483	312	795
1937 .. .. .	507	345	852
1938 .. .. .	466	269	735
1939 .. .. .	413	306	719
1940 .. .. .	493	317	810
1941 .. .. .	521	297	818

Cases of discharged soldiers referred for treatment—254.

Number of patients who had so far recovered that no signs of active disease were found :  
Insured—175 ; Uninsured—123.

Grants of food were made in 1,186 instances to 201 families.

13,358 special visits have been paid by the tuberculosis nurses and 505 visits by the  
clinical nurse who attends to domiciliary patients requiring surgical dressings and nursing care.

TABLE 14.—Insured Cases Treated in 1941.

Residential .. .. .	1,513
Tuberculosis Clinic .. .. .	57
Domiciliary .. .. .	1,931
Total .. .. .	<u>3,501</u>

## Analysis of Cases Treated.

TABLE 15.—Residential (Insured).

INSTITUTION	Total Cases Treated		Discharged from Institutions		Died	* Residential Treatment discontinued in other cases	Still under Residential Treatment on 1st Jan., 1942
	Males	Females	Improved	Without Improvement			
	(1)		(2)	(3)	(4)	(5)	(6)
PULMONARY							
Baguley .. .. .	353	206	101	13	43	17	179
			50	23	23	12	93
Crossley .. .. .	57	104	22	6	2	3	24
			51	3	4	4	42
Abergele .. .. .	68	11	29	1	3	1	34
			3	..	..	..	8
Monsall .. .. .	..	25	..	..	..	..	..
			16	..	3	..	6
Withington .. .. .	383	162	181	40	107	..	55
			65	23	47	..	27
Crumpsall .. .. .	40	17	8	14	17	..	1
			4	11	2	..	..
Manchester Royal Infirmary .. .. .	..	..	..	..	..	..	..
			..	..	..	..	..
Total Pulmonary .. .. .	901	525	530	134	251	37	474
NON-PULMONARY							
Manchester Royal Infirmary .. .. .	3	6	3	..	..	..	..
			6	..	..	..	..
Skin Hospital .. .. .	..	..	..	..	..	..	..
			..	..	..	..	..
Ancoats Hospital .. .. .	..	..	..	..	..	..	..
			..	..	..	..	..
Shropshire Orthopaedic Hospital .. .. .	24	16	14	1	1	..	8
			7	1	1	..	7
Withington .. .. .	22	9	11	4	4	..	3
			2	1	3	..	3
Crumpsall .. .. .	11	14	8	1	2	..	..
			8	2	3	..	1
Total Non-Pulmonary .. .. .	60	45	59	10	14	..	22
TOTAL—ALL FORMS .. .. .	961	570	589	144	265	37	496

\* The figures in column (5) relate to cases of which no definite report is available for various reasons—e.g., the withdrawal from the Institution of the insured persons themselves before the expiration of the period for which they were nominated for the treatment.

TABLE 16.—*Residential (Uninsured and Children under 15).*

INSTITUTION	Total Cases Treated			Discharged from Institutions		Died	* Residential Treatment discontinued in other cases (5)	Still under Residential Treatment on 1st Jan., 1942 (6)
	Males	Females (1)	Children	Improved (2)	Without Improvement (3)			
PULMONARY								
Baguley .. .. .	44	64		20 12	1 11	1 12	1 3	21 26
Crossley .. .. .	7	16		1 5	.. 1	1 ..	1 2	4 8
Abergele .. .. .	5	3		1 1	1 ..	.. ..	.. ..	3 2
Monsall .. .. .	..	21	115	30	2	1	1	81
Withington .. .. .	158	173		60 77	14 27	63 44	.. ..	21 25
Booth Hall .. .. .	..	..	1	..	..	1	..	..
Crumpsall .. .. .	31	16	75	32	7	12	7	17
				1 4	13 8	17 4	.. ..	.. ..
				..	..	..	..	..
Total Pulmonary	245	293	191	254	85	161	15	214
NON-PULMONARY								
Abergele .. .. .	..	..		.. 33	.. 4	.. 3	.. ..	.. 93
Manchester Royal Infirmary .. .. .	..	..		.. ..	.. ..	.. ..	.. ..	.. ..
Skin Hospital .. .. .	..	3		.. 3	.. ..	.. ..	.. ..	.. ..
Ancoats Hospital .. .. .	..	..		.. 1	.. ..	.. ..	.. ..	.. ..
Shropshire Orthopaedic Hospital .. .. .	4	3		.. 1	.. ..	1 1	.. ..	3 1
Withington .. .. .	11	16		7 6	2 3	1 4	.. ..	1 3
Booth Hall .. .. .	..	..		.. 24	.. 3	.. 27	.. 4	.. 8
Crumpsall .. .. .	2	3		1 1	.. ..	.. 2	.. ..	1 ..
				..	..	..	..	..
Total Non-Pulmonary .. .. .	17	25	200	77	12	39	4	110
TOTAL—ALL FORMS ..	262	318	391	331	97	200	19	324

\* The figures in column (5) relate to cases of which no definite report is available for various reasons—*e.g.*, the withdrawal from the Institution of the persons themselves before the expiration of the period for which they were nominated for the treatment.



## Light Therapy.

Artificial light treatment has been continued for those cases that experience has proved benefit by this form of therapy. During the last twelve years 596 cases have been under this treatment. Two forms of artificial sunlight are made use of, viz., the mercury vapour lamp (which was in use up to the time the department moved into the new clinic) and the open arc lamp.

The following table analyses these cases in detail and shows a gain in weight and improvement in many patients. Quiescence was secured in a number of those who completed the necessary course of treatment. It is to be noted that those particularly benefiting are the sufferers from tuberculous adenitis (with or without abscess formation), and those in whom abdominal tuberculosis existed. No figures of the treatment of lupus appear, as these cases are treated by the Manchester and Salford Hospital for Skin Diseases (on behalf of the Corporation) by light therapy, and in the majority of instances with very marked benefit.

TABLE 17.

[illegible]

The following table summarises the non-pulmonary cases treated at various Institutions :—

**TABLE 18.**

Tuberculosis of :—

Bones and Joints .. .. .	218
Glands .. .. .	37
Genito Urinary Tract .. .. .	7
Abdomen .. .. .	39

Skin—

1. Lupus Vulgaris .. .. .	74
2. Toxi Tuberculids .. .. .	6
3. Bazins Disease .. .. .	10
4. Tuberculous Ulceration of Skin .. .. .	9

**TABLE 19.**

Tables showing After History of Quiescent and Arrested Cases (Insured).

1931.

*No Tubercle Bacilli found.*

*Tubercle Bacilli found.*

Stage	Sex	Number of cases marked off as Quiescent	Number known to be still living at end of 1941	Lost sight of	Died	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1941	Lost sight of	Died
I.	M	78	29	25	24	M	25	14	10	1
	F	57	22	25	10	F	5	1	4	..
II.	M	48	17	17	14	M	29	9	7	13
	F	14	5	6	3	F	7	2	3	2
III.	M	9	4	2	3	M	5	3	..	2
	F	2	1	..	1	F	1	..	..	1
	M & F	208	78	75	55	M & F	72	29	24	19

1932.

I.	M	46	18	28	10	M	21	6	11	4
	F	53	12	21	10	F	16	6	8	2
II.	M	30	6	20	4	M	15	8	4	3
	F	22	10	9	4	F	9	4	4	1
III.	M	9	2	4	3	M	2	1	1	..
	F	4	..	2	2	F	3	1	..	2
	M & F	164	48	84	33	M & F	66	26	28	12

Tables showing After History of Quiescent and Arrested Cases (Insured)—continued.

TABLE 19—continued.

1933.

*No Tubercle Bacilli found.*

*Tubercle Bacilli found.*

Stage	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1941	Lost sight of	Died	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1941	Lost sight of	Died
I.	M	35	15	10	10	M	10	5	2	3
	F	24	9	13	2	F	5	2	2	1
II.	M	22	2	13	7	M	15	8	1	6
	F	15	2	8	5	F	5	1	3	1
III.	M	3	2	..	1	M	4	2	1	1
	F	3	3	..	..	F	..	..	..	..
	M & F	102	33	44	25	M & F	39	18	9	12

1934.

I.	M	35	14	17	4	M	14	8	6	..
	F	28	16	12	..	F	3	1	1	1
II.	M	14	8	5	1	M	9	3	3	3
	F	18	11	5	2	F	3	2	..	1
III.	M	..	..	..	..	M	2	1	1	..
	F	1	1	..	..	F	..	..	..	..
	M & F	96	50	39	7	M & F	31	15	11	5

1935.

I.	M	57	26	19	12	M	20	10	6	4
	F	52	34	15	3	F	13	9	3	1
II.	M	39	23	13	3	M	22	12	4	6
	F	22	12	7	3	F	8	5	3	..
III.	M	1	1	..	..	M	4	2	1	1
	F	3	3	..	..	F	3	3	..	..
	M & F	174	99	54	21	M & F	70	41	17	12



Tables showing After History of Quiescent and Arrested Cases (Insured)—continued.

TABLE 19—continued.

1936.

*No Tubercle Bacilli found.*

*Tubercle Bacilli found.*

Stage	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1941	Lost sight of	Died	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1941	Lost sight of	Died
I.	M	53	25	23	5	M	27	20	7	..
	F	51	30	16	5	F	19	15	4	..
II.	M	15	7	4	4	M	29	13	7	9
	F	24	15	7	3	F	11	9	2	..
III.	M	6	2	1	3	M	8	5	..	3
	F	4	2	..	2	F	2	2	..	..
	M & F	153	81	51	22	M & F	96	64	20	12

1937.

I.	M	40	24	13	3	M	19	13	7	..
	F	33	27	5	1	F	8	6	1	1
II.	M	20	9	10	1	M	25	18	3	4
	F	18	12	5	1	F	17	14	2	1
III.	M	2	1	1	..	M	4	2	1	1
	F	2	1	1	..	F	4	3	..	1
	M & F	115	74	35	6	M & F	77	56	14	8

1938.

I.	M	34	22	10	2	M	9	8	1	..
	F	30	23	4	3	F	12	5	6	1
II.	M	27	18	6	3	M	33	20	7	6
	F	17	13	3	1	F	11	10	1	..
III.	M	3	2	1	..	M	..	..	..	..
	F	1	1	..	..	F	1	1	..	..
	M & F	112	79	24	9	M & F	66	44	15	7

Tables showing After History of Quiescent and Arrested Cases (Insured)—continued.

TABLE 19—continued.

1939.

*No Tubercle Bacilli found.*

*Tubercle Bacilli found.*

Stage	Sex	Number of cases marked off as Quiescent	Number known to be still living at end of 1941	Lost sight of	Died	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1941	Lost sight of	Died
I.	M	19	14	3	2	M	14	8	6	..
	F	15	12	1	2	F	3	1	1	1
II.	M	22	15	3	4	M	9	3	3	3
	F	18	14	2	2	F	3	2	..	1
III.	M	1	1	..	..	M	2	1	1	..
	F	3	2	..	1	F	..	..	..	..
	M & F	78	58	9	11	M & F	31	15	11	5

1940.

I.	M	11	7	4	..	M	2	1	1	..
	F	20	18	2	..	F	2	2	..	..
II.	M	14	13	..	1	M	22	21	1	..
	F	5	4	1	..	F	16	14	2	..
III.	M	3	2	..	1	M	..	..	..	..
	F	1	1	..	..	F	4	4	..	..
	M & F	54	45	7	2	M & F	46	42	4	..

**Abergele, Baguley, and Crossley Sanatoria.**

Conditions relative to patients treated in the above sanatoria during the last ten years are set forth in the following tables.

**TABLE 20.**

**Abergele Sanatorium.**

*Adult Males—Pulmonary.*

Year	No. of new cases	Position at the end of 1941				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	These are additional to the cases in Column 2 and are given to show the number of beds occupied
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1932 ..	68	21	1	30	16	16
1933 ..	61	24	2	19	16	18
1934 ..	54	16	6	18	14	12
1935 ..	37	15	2	9	11	16
1936 ..	40	17	4	10	9	9
1937 ..	26	15	2	2	7	12
1938 ..	26	13	2	3	8	9
1939 ..	42	25	6	5	6	9
1940 ..	44	42	1	..	1	..
1941 ..	33	33	..	..	..	4
Total ..	431	221	26	96	88	105

*Adult Females—Pulmonary.*

Year	No. of new cases	Position at the end of 1941				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	These are additional to the cases in Column 2 and are given to show the number of beds occupied
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1932 ..	11	4	1	3	3	2
1933 ..	10	3	..	5	2	5
1934 ..	9	6	..	2	1	1
1935 ..	11	5	1	4	1	1
1936 ..	10	6	..	3	1	..
1937 ..	11	7	..	4	..	2
1938 ..	10	5	..	3	2	1
1939 ..	11	10	1	..	..	..
1940 ..	5	4	..	..	1	..
1941 ..	4	4	..	..	..	1
Total ..	92	54	3	24	11	13



TABLE 20—continued.

## Abergele Sanatorium.

*Child Males—Pulmonary.*

Year	No. of new cases	Position at the end of 1941				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1932 ..	20	13	..	1	6	..
1933 ..	28	13	..	..	15	..
1934 ..	16	11	..	4	1	..
1935 ..	21	12	2	..	7	1
1936 ..	16	11	..	1	4	1
1937 ..	19	13	..	..	6	3
1938 ..	20	16	..	..	4	1
1939 ..	26	22	1	..	3	2
1940 ..	19	17	..	1	1	2
1941 ..	21	21	..	..	..	2
Total ..	206	149	3	7	47	12

*Child Females—Pulmonary.*

Year	No. of new cases	Position at the end of 1941				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1932 ..	20	9	3	2	6	1
1933 ..	23	8	4	3	8	..
1934 ..	16	9	1	3	3	2
1935 ..	22	11	2	3	6	1
1936 ..	24	10	5	1	8	2
1937 ..	22	16	4	..	2	..
1938 ..	17	11	1	..	5	..
1939 ..	14	10	2	..	2	1
1940 ..	20	16	4	..	..	..
1941 ..	16	15	1	..	..	1
Total ..	194	115	27	12	40	8

TABLE 20—continued.

## Abergele Sanatorium.

*Child Males—Non-pulmonary.*

Year	No. of new cases	Position at the end of 1941				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	
(1)	(2)	(3)	(4)	(5)	(6)	These are additional to the cases in Column 2 and are given to show the number of beds occupied (7)
1932 ..	60	40	4	1	15	1
1933 ..	23	15	1	..	7	..
1934 ..	29	18	1	1	9	1
1935 ..	24	16	2	1	5	..
1936 ..	31	18	1	..	12	..
1937 ..	24	18	..	..	6	1
1938 ..	27	22	..	..	5	3
1939 ..	24	22	1	..	1	3
1940 ..	14	14	..	..	..	3
1941 ..	25	23	2	..	..	2
Total ..	281	206	12	3	60	14

*Child Females—Non-pulmonary.*

Year	No. of new cases	Position at the end of 1941				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	
(1)	(2)	(3)	(4)	(5)	(6)	These are additional to the cases in Column 2 and are given to show the number of beds occupied (7)
1932 ..	36	25	2	1	8	..
1933 ..	20	12	..	2	6	..
1934 ..	15	12	..	..	3	1
1935 ..	16	10	..	1	5	1
1936 ..	28	19	3	1	5	1
1937 ..	24	20	2	..	2	..
1938 ..	14	12	1	..	1	3
1939 ..	13	13	..	..	..	2
1940 ..	11	10	..	..	1	..
1941 ..	16	16	..	..	..	..
Total ..	193	149	8	5	31	8

**TABLE 21.**  
**Baguley Sanatorium.**  
*Males.*

Year	No. of new cases	Position at the end of 1941				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1932 ..	263	54	86	96	27	81
1933 ..	285	75	83	110	17	67
1934 ..	297	68	102	107	20	96
1935 ..	250	61	60	98	31	118
1936 ..	235	73	59	77	23	89
1937 ..	264	98	50	82	34	91
1938 ..	188	73	33	58	24	76
1939 ..	186	81	50	38	17	93
1940 ..	213	137	39	22	15	93
1941 ..	181	163	14	1	3	52
Total ..	2362	886	576	689	211	856

*Females.*

Year	No. of new cases	Position at the end of 1941				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1932 ..	157	35	54	52	16	21
1933 ..	162	51	47	55	9	33
1934 ..	184	58	41	64	21	56
1935 ..	177	61	34	67	15	31
1936 ..	144	54	33	47	10	39
1937 ..	148	60	41	38	9	27
1938 ..	148	67	21	39	21	41
1939 ..	131	59	31	27	14	48
1940 ..	133	82	23	17	11	37
1941 ..	136	110	16	5	5	29
Total ..	1520	637	341	411	131	362



**TABLE 22.**  
**Crossley Sanatorium.**  
*Males.*

Year	No. of new cases	Position at the end of 1941				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1932 ..	38	12	..	16	10	26
1933 ..	52	17	1	29	5	22
1934 ..	43	17	..	16	10	12
1935 ..	72	31	2	17	22	14
1936 ..	38	16	..	13	9	15
1937 ..	35	16	2	9	8	11
1938 ..	48	25	1	10	12	8
1939 ..	39	27	2	5	5	11
1940 ..	36	28	3	4	1	8
1941 ..	32	32	..	..	..	8
Total ..	433	221	11	119	82	135

*Females.*

Year	No. of new cases	Position at end of 1941				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1932 ..	135	58	1	50	26	54
1933 ..	130	43	3	49	35	37
1934 ..	95	50	2	28	15	32
1935 ..	98	44	2	28	24	32
1936 ..	92	51	1	29	11	30
1937 ..	85	42	1	20	22	23
1938 ..	61	32	4	13	12	23
1939 ..	66	42	2	8	14	28
1940 ..	65	54	2	..	9	21
1941 ..	45	45	..	..	..	15
Total ..	872	461	18	225	168	295

ABERGELE SANATORIUM.

At the commencement of the year there were 211 patients in the sanatorium :—  
45 in the adult section and  
166 in the children's section.

At the end of the year there were 221 patients in the sanatorium :—  
47 in the adult section and  
174 in the children's section.

General Classification of Cases Treated.

Classification on Admission	In Residence on 1st Jan., 1941		Admitted		Discharged		Died		In Residence on 1st Jan., 1942	
	Adults	Children	Adults	Children	Adults	Children	Adults	Children	Adults	Children
<i>Pulmonary Group—</i>										
T.B. Minus .. .. .	10	51	20	29	17	25	..	..	13	55
T.B. Plus Group 1 .. .	2	1	1	2	3	..	..	..	..	3
T.B. Plus Group 2 .. .	31	17	21	10	16	4	3	1	33	22
T.B. Plus Group 3 .. .	2	1	..	..	1	1	..	..	1	..
<i>Non-Pulmonary Group—</i>										
Bones and Joints .. .	..	73	..	24	..	22	..	2	..	73
Abdominal .. .. .	..	12	..	7	..	6	..	..	..	13
Other Organs .. .. .	..	..	..	1	..	..	..	..	..	1
Peripheral Glands .. .	..	10	..	5	..	8	..	1	..	6
Totals .. .. .	45	165	42	78	37	66	3	4	47	173
Observation—										
Pulmonary Group .. .	..	1	..	3	..	3	..	..	..	1
Non-pulmonary Group .. .	..	..	..	*1	..	1	..	..	..	..

TOTAL PATIENTS TREATED—						
Adults' section of the sanatorium	..	..	..	..	87	
Children's section of the sanatorium	..	..	..	..	248	

\* One of the four cases admitted for observation was ultimately diagnosed as tuberculous and is included as an admission in the Non-Pulmonary Group of this table.

### Adult Section of the Sanatorium.

In residence on 1st January, 1941 .. .. .	45
Admitted .. .. .	42
Discharged .. .. .	37
Died .. .. .	3
In residence on 1st January, 1942 .. .. .	47

The more important aspects of general and special treatment have been reviewed in previous reports. No alteration of any significance in the routine of treatment has been made during the current year.

### Results of Treatment.

*Patients discharged as "Quiescent" or "Improved."*

The duration of treatment depends on the response of the individual patient. On discharge it is desired that the general condition of the patient should be satisfactory, that the temperature and pulse records should be within normal limits and that the clinical signs and the result of radiological and other ancillary examinations denote inactive disease. In 34, or 87.2 per cent. of the patients discharged during the year, these postulates have been attained.

### Children's Section of the Sanatorium.

In residence on 1st January, 1941 .. .. .	166
Admitted .. .. .	82
Discharged .. .. .	70
Died .. .. .	4
In residence on 1st January, 1942 .. .. .	174

### Treatment.

This has followed the same lines as in previous years—both in local and general treatment. 190 splints were made during the year for application to and treatment of the children, and 509 radiograms taken for diagnosis and observation of the results of treatment. 31 surgical operations were performed. 799 examinations were made in the pathological laboratory.

### School.

#### *General Statistics.*

Number on school register 1st January, 1941 .. .. .	161
Number discharged .. .. .	68
Number admitted .. .. .	68
Number on school register 31st December, 1941 .. .. .	161

It is desired to record the very great advantage derived from the visits of Professor E. D. Telford, Consultant Surgeon to the Sanatorium.

### BAGULEY SANATORIUM.

The number of available beds was (average) 312. This number was less than usual owing to the fact that one ward of 30 beds was (until September 9th) occupied by E.M.S. patients. The number of available beds at December 31st, 1941, was 334.

The number of patients admitted was 406, the daily average number of beds occupied being 300.



Table giving the number of admissions, discharges, etc., compared with the previous four years :—

	1937	1938	1939	1940	1941
Number of patients—					
In hospital, 1st January .. .. .	318.	329	317	224	279
Admitted during the year .. .. .	540	460	509	490	406
Discharged during the year .. .. .	422	387	522	327	271
Died during the year .. .. .	107	85	80	108	83
Total treated during the year .. .. .	858	789	826	714	685
Remaining in hospital, 31st December .. ..	329	317	224	279	331
Daily average number of beds occupied .. ..	329.64	329.22	326	276	300
Average length of stay of patients discharged—					
Males.. .. . (days)	187.01	228.79	185.66	145.05	203.3
Females .. .. . „	245.37	270.62	238.5	159.72	243.91
Average length of time in hospital of fatal cases—					
Males.. .. . (days)	289.44	305.98	126	146.49	278.2
Females .. .. . „	338.78	266.88	303.84	135	193.54
Case mortality .. .. .	12.7	10.77	9.60	15.13	12.12

Cases admitted from the districts of the North Cheshire Joint Hospital Board are included in all totals given in this report. The details of such cases are :—

On January 1st, there were ten patients in the Sanatorium ; seven patients were admitted during the period, seven patients were discharged, and four died ; six patients remained in the hospital on December 31st.

*Pathological Laboratory Report :—*

Specimens of sputum examined .. .. .	2,499
Specimens found to be positive .. .. .	1,391
Specimens found to be negative .. .. .	1,108

*Special Concentration Tests :—*

Specimens of sputum examined .. .. .	88
Specimens found to be positive .. .. .	21
Specimens found to be negative .. .. .	67

Other examinations :	Number	Result	
		Positive	Negative
Pleural effusion .. .. .	38	5	33
Pus .. .. .	8	1	7
Spinal fluid .. .. .	2	—	2

A large number of special examinations were carried out by the Public Health Laboratory.

*Blood Sedimentations :—*

This test still proves to be of great value and the number carried out was 1,388.

*X-Ray Report :—*

Patients screened	.. .. .	1,512
Skiagrams taken	.. .. .	1,188

*Dental Report :—*

Attendances	.. .. .	661
Extractions	.. .. .	417
Fillings	.. .. .	98
Scraping and cleaning	.. .. .	20
Dentures	.. .. .	6
Repairs and adjustments to dentures	.. .. .	13

*Summary of Immediate Results of Treatment.*

Classification	Condition on Discharge				Died
	Quiescent	Improved	Stationary	Worse	
Class T.B. Minus .. ..	13	36	8	1	5
„ T.B. Plus, Group I.	1	4	1	..	..
„ T.B. Plus, Group II.	14	85	41	14	42
„ T.B. Plus, Group III.	..	20	4	5	36
Totals .. ..	28	145	54	20	83

**AMBULANCE AND DISINFECTING STATION.**

The station is open day and night for the removal of infectious disease cases and for the collection and disinfection of infected bedding.

*Ambulances.*

There is a fleet of seven ambulances in use for the removal of infectious disease cases, including tuberculosis. During the year under review the number of cases removed to hospital was 3,931. 59,531 miles were covered.

*Disinfection.*

For the disinfection of bedding, clothing, etc., two steam disinfectors are installed at the station. For articles which cannot be subjected to steam, disinfection by formalin is carried out in a chamber built for the purpose. Three motor bedding vans are used for the removal of infected bedding, clothing, etc., and 115,993 articles were removed. The mileage covered by the bedding vans was 38,272.

### CLEANSING STATION.

The cleansing station at Monsall Road, Newton Heath, is used for the treatment of scabies, cleansing of persons from the clearance areas and verminous persons.

The following table shows the number of cases treated during the year :—

Month	Scabies (treatments)	Voluntary cleansings	Compulsory cleansings	Dis- infestation	Special cases	Totals
January .. ..	723	14	—	22	—	759
February .. ..	839	18	—	12	—	869
March .. .. .	927	15	33	—	—	975
April .. .. .	938	28	30	387	—	1,383
May .. .. .	1,019	18	54	57	—	1,148
June .. .. .	667	20	9	150	—	846
July .. .. .	852	10	37	220	—	1,119
August .. ..	803	28	—	145	—	976
September ..	1,211	68	41	154	—	1,474
October .. ..	1,247	41	27	205	—	1,520
November .. ..	928	31	10	2	—	971
December .. ..	1,367	28	6	42	—	1,443
Totals .. ..	11,521	319	247	1,396	—	13,483

### VENEREAL DISEASES SCHEME.

The treatment of Venereal Diseases was carried out, as in past years, at the several special clinics at voluntary hospitals, at two of the maternity centres, and in the special wards set apart at Crumpsall Hospital. The preventive treatment clinic at St. Luke's Hospital has been extensively used and clearly meets a public need.

During the year 737 persons suffering from syphilis and 1,279 from gonorrhœa presented themselves for treatment for the first time.

Of the 737 persons suffering from syphilis who are recorded as having attended for the first time, 41 were congenital cases of which 22 were under treatment at the Royal Eye Hospital. 1,517 persons attended who, on examination, were found not to be suffering from venereal disease.

As regards gonorrhœa, 975 males and 304 females attended for the first time. These figures compare with 956 and 247 respectively in the previous year. It is satisfactory to note that the number of attendances made by gonorrhœal patients continues to increase, but there must be a considerable number of infected persons, especially among females, who never come under treatment at all.

#### *Defaulters.*

1,180 persons suffering from venereal disease ceased to attend before the completion of treatment. This gives a defaulter rate of 30·5 per cent. reckoned on the number of patients actually found to be suffering from venereal disease attending the clinics.

The dangerous defaulters, that is, those in the infectious stage, numbered 857, or 72·6 per cent. of the total, and it is these patients who are responsible for the spread of much disease. Follow-up letters are sent, but the results, so far as the return for treatment is concerned, are somewhat disappointing.



## Summary of Work Done at all the Centres during 1941.

	Syphilis		Soft Chancre		Gonorrhœa		Conditions other than Venereal		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Totals
Number of cases on 1st January, 1941, under treatment or observation .. .. .	560	519	4	..	264	200	130	158	958	877	1835
Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection .. .. .	51	51	..	..	11	17	..	8	62	76	138
Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from .. .. .	466	271	5	..	975	304	815	702	2261	1277	3538
Number of cases dealt with for the first time during the year under report known to have received treatment at other Centres for the same infection, or to have been under observation at other Centres .. .. .	86	32	1	..	34	10	1	..	122	42	164
Totals of Items 1, 2, 3, and 4	1163	873	10	..	1284	531	946	868	3403	2272	5675
Number of cases discharged after completion of treatment and final tests of cure .. .. .	106	75	5	..	427	150	748	637	1286	862	2148
Number of cases which ceased to attend before completion of treatment and were, on first attendance, suffering from .. .. .	210	197	..	..	296	154	..	..	506	351	857
Number of cases which ceased to attend after completion of treatment but before final tests of cure .. .. .	114	46	1	..	133	29	..	..	248	75	323
Number of cases transferred to other centres or to institutions, or to care of private practitioners .. .. .	153	46	2	..	130	36	..	..	285	82	367
Number of cases remaining under treatment or observation on 31st December, 1941 .. .. .	580	509	2	..	298	162	198	231	1078	902	1980
Totals of Items 5, 6, 7, 8, and 9 .. .. . (These Totals should agree with those of Items 1, 2, 3, and 4).	1163	873	10	..	1284	531	946	868	3403	2272	5675
Number of cases included in Item 6 which failed to complete one course of treatment .. .. .	62	47	..	..	..	..	..	..	62	47	109
Number of attendances :— a) for individual attention of the medical officers .. .. .	15337	11144	26	..	7170	4176	2617	2396	25150	17716	42866
b) for intermediate treatment, e.g., irrigation, dressing .. .. .	2151	..	42	..	18244	6830	518	62	20955	6892	27847
Total Attendances .. .. .	17488	11144	68	..	25414	11006	3135	2458	46105	24608	70713
In-patients :— (a) Total number of persons admitted for treatment during the year .. .. .	27	11	..	..	5	12	2	3	34	26	60
(b) Aggregate number of "in-patient days" of treatment given .. .. .	386	237	..	..	40	252	8	71	434	560	994
	Under 1 year		1 and under 5 years		5 and under 15 years		15 years and over		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total
Number of cases of congenital syphilis in Item 3 above, classified according to age periods .. .. .	2	8	1	1	3	8	7	11	13	28	41

The number of persons attending the Early Treatment Clinic, St. Luke's Hospital, was 2,161.

TABLE 1.

## SYPHILIS.

Total Number of Persons attending Manchester Clinics suffering from Syphilis  
and Average Number of Attendances per Individual, 1926-1941.

Year	Number of Patients	Number of Attendances	Average Number of Attendances per Patient
1926-30 (average per annum) ..	3,538	32,875	9.3
1931-35    ,,    ,,    ,,    ..	2,670	43,111	16.2
1936-40    ,,    ,,    ,,    ..	2,392	34,552	14.4
1936   ..   ..   ..   ..   ..   ..	2,709	40,330	14.9
1937   ..   ..   ..   ..   ..   ..	2,441	36,648	15.0
1938   ..   ..   ..   ..   ..   ..	2,427	35,129	14.5
1939   ..   ..   ..   ..   ..   ..	2,266	31,846	14.1
1940   ..   ..   ..   ..   ..   ..	2,118	28,807	13.6
1941   ..   ..   ..   ..   ..   ..	2,036	28,632	14.0

TABLE 2.

## GONORRHŒA.

Total Number of Persons attending Manchester Clinics suffering from Gonorrhoea  
and Average Number of Attendances per Patient, 1926-1941.

Year	Number of Patients	Number of Attendances	Average Number of Attendances per Patient
1926-30 (average per annum) ..	3,670	43,824	11.9
1931-35    ,,    ,,    ,,    ..	2,915	74,703	26.0
1936-40    ,,    ,,    ,,    ..	2,496	88,300	35.3
1936   ..   ..   ..   ..   ..   ..	2,572	88,403	34.4
1937   ..   ..   ..   ..   ..   ..	2,497	110,149	44.1
1938   ..   ..   ..   ..   ..   ..	2,619	119,131	45.5
1939   ..   ..   ..   ..   ..   ..	2,674	80,103	29.9
1940   ..   ..   ..   ..   ..   ..	2,119	43,716	20.6
1941   ..   ..   ..   ..   ..   ..	1,815	36,420	20.0

## MIDWIVES' SECTION.

All the arrangements sanctioned by the City Council for midwifery services have been maintained throughout the year.

### *Municipal Midwives.*

4,437 applications for municipal midwives were received. 3,730 patients were delivered, 410 were transferred to hospital on account of unsatisfactory condition before or during labour and 99 pregnancies ended before the 28th week. 204 applications were withdrawn (88 of these mothers were evacuated under the Government scheme), 116 others on account of domestic reasons and removal from the district.

Of the cases attended, 451 applied for assistance, of which 354 were assessed to pay part fee and no charge was made in 97 cases.

The following table gives the work done by the municipal midwives, compiled from their weekly returns :—

Deliveries as midwife .. .. .	3,377
Deliveries as maternity nurse.. .. .	377
Cases of abortion nursed .. .. .	99
Morning visits .. .. .	51,223
Evening visits .. .. .	14,941
Nursing visits to patients discharged from municipal hospitals on or after the 10th day .. .. .	4,507
Ante-natal visits to patients in their own homes.. .. .	12,713
Ante-natal visits by patients to midwives' homes .. .. .	12,471
Attendances by midwives at ante-natal clinics .. .. .	1,982

Of the 3,730 cases attended by the midwives, 1,656 were delivered between 9 a.m. and 9 p.m. and 2,074 were delivered between 9 p.m. and 9 a.m.

### *Analysis of Cases taken by Midwives who notified intention to practice.*

Midwives notifying intention to practice	Number of Midwives	Midwife only at the Case		Midwife with Doctor called in		Midwife as Maternity Nurse	Total Number of Cases	Per cent. of Births in City
		Primi-paræ	Multi-paræ	Primi-paræ	Multi-paræ			
1. BIRTHS AT HOME.								
(a) Municipal midwives .. .. .	61	363	1,899	351	764	377	3,754	37·20
(b) Independent midwives living in Manchester area .. .. .	12	25	198	33	83	70	409	4·05
(c) Independent midwives living outside Manchester area .. .. .	7	2	16	3	2	18	141	·04
Midwives employed by District Nursing Institution:—								
Manchester .. .. .	20	24	107	21	29	35	216	2·14
Salford .. .. .	..							
County Nursing Association .. ..	..							
	100	414	2,220	408	878	500	4,420	43·43
2. BIRTHS IN INSTITUTIONS.								
Midwives employed in registered Nursing Homes and having no Resident medical practitioner ..	36	223	208	111	21	340	903	8·94
	136	637	2,248	519	899	840	5,323	52·37

The total number of cases taken by midwives shows a decrease of 779. There was a decrease of 996 of all notified births.



*Practical Training of Midwives.*

The City of Manchester and St. Mary's District Midwifery Training Association—formed last year—has functioned during 1941 in conformity with its constitution.

8 municipal midwives are approved by the Central Midwives' Board to take pupils for district experience for Part II. of the training.

**Table showing calls for Medical Assistance.**

	Records sent to Doctors		Records sent to Ante-natal Clinics
	Assistance in labour and puerperium	Assistance during pregnancy	
Midwives in municipal and private practice ..	2,109	438	1,896
Midwives of District Nursing Association ..	170	11	11
Midwives in maternity homes .. .. .	70	4	2

11.70 per cent. of all records of sending for medical aid by midwives for emergencies during labour and the puerperium were for delayed labour and 29.58 per cent. for ruptured perineum. This is respectively 6.61 per cent. and 16.93 per cent. of all their cases, and compares with 9.49 per cent. and 19.63 per cent. for 1940.

55.10 per cent. of all the records were sent for assistance during labour. 16.56 per cent. were for unsatisfactory conditions occurring during the puerperium. Of these 22.56 per cent. were for the infant.

*Maternal Deaths.*

29 deaths from child-birth occurred amongst Manchester mothers and were investigated in accordance with the request of the Ministry of Health. This figure is 3 more than last year.

It is satisfactory to record a decrease of 2 in the deaths from abortion.

**Causes of Death in Child-birth during 1941.**

Cause	Normal Full-term Labour	Abnormal Full-term Labour	Abortion	Total	Rate per 1,000 Registered Live and Still Births	
					1940	1941
Puerperal Sepsis .. .. .	4	5	2	11	·46	1·07
Other causes .. .. .	14 (1 undelivered)		4	18	1·97	1·76
				29	2·43	2·83

## Incidence of Puerperal Sepsis.

	Puerperal Sepsis Incidence and Case Mortality	
	Cases of Puerperal Sepsis per 1,000 Notified Births	Mortality per cent. of Notified Puerperal Sepsis Cases
1932 .. .. .	7.32	17.7
1933 .. .. .	10.29	16.16
1934 .. .. .	10.18	9.76
1935 .. .. .	9.20	20.16
1936 .. .. .	8.78	17.39
1937 .. .. .	6.22	21.11
1938 .. .. .	6.62	18.39
1939 .. .. .	10.61	7.5
1940 .. .. .	8.64	6.4
1941 .. .. .	9.3	11.91

Analysis of 18 deaths due to other causes than puerperal sepsis :—

Toxæmia .. .. .	1
Acute nephritis and abortion .. .. .	1
Ectopic gestation .. .. .	1
Uræmia following ectopic gestation.. .. .	1
Uterine Hæmorrhage due to miscarriage .. .. .	2
Post partum hæmorrhage .. .. .	2
Shock .. .. .	4
Ruptured uterus .. .. .	1
Fibroid uterus .. .. .	1
Empyema following Cæsarean Section .. .. .	1
Pulmonary embolism .. .. .	1
Acute cardiac failure .. .. .	1
Cardiac failure and cerebral hæmorrhage .. .. .	1
	—
	18
	—

## OPHTHALMIC SECTION.

*Ophthalmia Neonatorum.*

120 cases were notified by private practitioners or by the Royal Eye Hospital as cases of ophthalmia neonatorum. A further 313 cases were reported by midwives who had advised medical aid for unsatisfactory eye conditions not subsequently notified as ophthalmia neonatorum. Of these, 66 related to infants discharged from hospital (with their mothers) on or after the 10th day.

*Corneal Cases.*

There were 2 cases with involvement of the cornea. In both cases the eyes cleared under treatment.

## CHILD WELFARE CENTRES.

At the end of 1941 there were 21 municipal infant welfare centres and 1 voluntary centre.

There are at the various centres 116 weekly medical consultations, comprising 72 infant sessions, 2 special birthday sessions, 6 sunlight, 32 ante-natal, and 5 toddlers' sessions, at which an attempt is made to secure the attendance of children between 2 and 5 years of age only.

At the end of the year there were on the centre register :—

4,907 children under 1 year.  
3,422 children between 1 and 2 years.  
4,564 children between 2 and 5 years.

68.6 per cent. of all Manchester children under 1 year attended at least once.

156,299 attendances were made at the various sessions :—

95,858 by children under 1 year.  
30,092 „ between 1 and 2 years.  
16,318 „ „ 2 and 3 „  
9,467 „ „ 3 and 4 „  
4,534 „ „ 4 and 5 „

### *Toddlers' Sessions.*

A weekly examination session is set apart for children between 2 and 5 years of age at Newton Heath, Ancoats, and Openshaw centres. The Ancoats session was discontinued in May.

1,027 invitations were sent to 2-year-olds, of whom 83 were brought for examination; and 1,096 were sent to 3-year-olds, of whom 51 were brought for examination.

It is difficult to give an adequate conception of the great amount of devoted work carried out by the Schools for Mothers. Grateful acknowledgment is made to the very large and important contribution made by this society to the work of maternity and child welfare in the city.

### *Ante-natal Clinics.*

There are now ante-natal clinics established at 16 centres, where 32 sessions are held weekly. Bi-weekly sessions are held at Blackley, Cheetham, Harpurhey, Withington, Rusholme, West Gorton, Hulme, Levenshulme, Newton Heath, Northenden, and tri-weekly sessions are held at Ardwick, Collyhurst, and Openshaw. At Hulme and Higher Ardwick ante-natal work is combined with V.D. treatment for mothers and children. 5,564 new mothers were admitted and 27,662 attendances were made.

In addition to the ante-natal sessions provided at the infant welfare centres, ante-natal clinics are established at both Crumpsall and Withington Hospitals.

### *Post-natal Clinics.*

The after-effects of child birth continue to give rise to concern and every attempt was made to secure the attendance of mothers for a post-natal examination at one of the 16 ante-natal centres. 296 presented themselves for complete examination at four to six weeks after confinement.



## Ante-Natal Cases at Centres and Results in Delivery.

CENTRE	On Register Jan. 1st, 1941	New Cases	Transferred from another Centre	TOTALS	On Register Jan. 1st, 1942	Term Births	Still-births included in Term Births	Premature Births	Still-births included in Premature Births	Mothers left District before Confinement		Transferred to another Centre	Mothers not Pregnant	TOTALS
										Evac.	Others			
Ancoats .. .. .	28	148	1	177	36	116	2	8	2	7	4	2	4	177
Ardwick .. .. .	82	398	4	484	90	293	6	19	3	52	15	1	14	484
Blackley .. .. .	75	343	1	419	100	273	5	13	1	21	5	3	4	419
Chorlton-upon-Medlock ..	49	183	1	233	44	114	2	10	6	45	7	4	9	233
Collyhurst .. .. .	122	510	5	637	127	440	11	9	6	43	6	2	10	637
Cheetham .. .. .	87	370	1	458	122	242	7	10	2	39	38	2	5	458
Clayton .. .. .	44	252	2	298	77	175	7	7	3	13	17	3	6	298
Gorton .. .. .	127	478	2	607	151	378	5	16	4	27	17	3	15	607
Haipurhey .. .. .	100	390	1	491	110	323	4	20	6	13	10	4	11	491
Hulme .. .. .	38	161	1	200	37	108	..	10	4	26	17	1	1	200
Levenshulme .. .. .	75	304	2	381	93	205	6	20	5	29	22	3	9	381
Newton Heath .. .. .	92	375	2	469	103	278	8	23	11	28	27	2	8	469
Northenden .. .. .	113	332	1	446	88	315	11	19	1	5	7	1	11	446
Openshaw .. .. .	150	650	5	805	208	487	11	53	22	35	8	..	14	805
Rusholme .. .. .	79	358	2	439	107	212	4	12	5	65	29	5	9	439
Withington .. .. .	88	312	5	405	92	195	3	7	5	81	26	..	4	405
Totals .. .. .	1,349	5,564	36	6,949	1,585	4,154	92	256	86	529	255	36	134	6,949

### ANTE-NATAL CASES AT CENTRES AND NUMBER ATTENDING FOR POST-NATAL EXAMINATION.

Centre	Normal Births		Abnormal Births		Died	Attended for post-natal examinations
	Live Births	Still-births	Live Births	Still-births		
Ancoats .. .. .	167	2	13	2	—	—
Ardwick .. .. .	268	4	33	7	2	44
Blackley .. .. .	229	5	49	3	1	15
Chorlton-upon-Medlock ..	100	2	17	5	—	5
Collyhurst .. .. .	413	7	19	10	—	19
Cheetham .. .. .	221	7	22	2	—	4
Clayton .. .. .	157	3	15	7	1	5
Gorton .. .. .	356	3	29	6	2	5
Harpurhey .. .. .	298	2	35	8	2	12
Hulme .. .. .	103	—	11	4	—	5
Levenshulme .. .. .	184	3	26	12	—	24
Newton Heath .. .. .	233	9	50	9	—	39
Northenden .. .. .	281	8	41	4	1	57
Openshaw .. .. .	428	15	79	18	2	23
Withington .. .. .	167	5	27	3	—	15
Totals .. .. .	3,743	79	487	101	11	296

#### Causes of Deaths of Mothers attending the Centre Ante-natal Clinics.

Puerperal septicaemia .. .. .	3
Obstetric shock .. .. .	1
Cardiac failure .. .. .	3
Ruptured uterus .. .. .	1
Empyema .. .. .	1
Pulmonary embolism .. .. .	1
Toxaemia .. .. .	1

## Comparison of Children in Age Groups attending the Welfare Centres.

CENTRE	On Register January 1st, 1941			New Patients			Died	Marked off as not attending			On Register, January 1st, 1942		
	0—1	1—2	2—5	0—1	1—2	2—5		0—1	1—2	2—5	0—1	1—2	2—5
Abbey Hey .. .. .	277	206	274	320	30	79	11	40	167	242	248	179	232
Ancoats .. .. .	158	141	269	174	21	53	19	39	126	244	111	84	130
Ardwick .. .. .	365	246	379	491	92	181	45	89	298	415	340	201	278
Blackley .. .. .	338	218	305	423	69	96	11	65	211	286	353	194	276
Chorlton-upon-Medlock ..	364	312	441	310	70	150	41	100	320	480	218	149	219
Cheetham .. .. .	266	185	218	324	62	114	13	67	235	253	213	122	189
Clayton .. .. .	206	119	152	189	23	57	8	20	140	177	135	101	111
Collyhurst .. .. .	391	236	335	474	76	143	31	80	331	365	339	193	240
Chorlton-cum-Hardy ..	164	148	251	220	41	68	2	31	109	228	150	127	171
Didsbury .. .. .	132	119	190	151	22	47	2	19	77	150	101	111	158
West Gorton .. .. .	299	197	322	371	56	128	22	38	210	235	273	172	332
Harpurhey .. .. .	297	209	290	376	57	138	21	65	191	285	284	193	260
Holy Name .. .. .	9	19	25	47	16	11	1	2	8	8	39	18	22
Hulme .. .. .	218	134	151	226	49	78	19	78	172	196	140	86	91
Levenshulme .. .. .	326	230	292	472	53	99	18	77	188	275	317	266	270
Newton Heath .. .. .	349	234	391	419	54	154	14	81	246	404	307	196	263
Northenden .. .. .	257	251	518	311	83	177	8	45	188	426	202	184	391
Openshaw .. .. .	334	253	295	474	64	115	31	74	295	309	319	192	195
Rusholme .. .. .	382	211	336	462	79	99	15	116	316	336	308	168	208
Sharston .. .. .	240	230	397	271	67	141	7	51	177	373	158	185	200
Wilbraham .. .. .	66	50	79	93	18	20	5	12	41	92	63	51	35
Withington .. .. .	298	212	277	413	70	129	18	86	144	284	289	250	233
Totals .. .. .	5,736	4,160	6,187	7,011	1,172	2,277	362	1,275	4,190	6,063	4,907	3,422	4,564
COMPARATIVE TABLES FOR PREVIOUS TWO YEARS:—													
1940 .. .. .	4,841	3,312	4,413	7,694	1,404	2,824	240	1,994	2,204	2,687	5,736	4,160	6,187
1939 .. .. .	5,688	4,292	6,479	7,951	1,570	2,858	228	2,406	4,474	7,386	4,841	3,312	4,413

### National Milk Scheme.

The National Milk Scheme continued to operate in place of the free and assisted scheme of previous years.



## WAR-TIME DAY NURSERIES.

Owing to the need for provision being made for the children of war workers, the Government recommended the opening of war-time day nurseries.

At first Manchester was not included in the scheme, but later the need arose and the first day nursery was opened at St. Aidan's Rectory, Bosworth Street, Openshaw, on September 29th. This nursery has accommodation for 50 children.

Arrangements are made for the children to be cared for between the hours of 7 a.m. and 7 p.m. They are provided with meals, and the parents contribute 1/- per day towards the cost.

## MATERNITY BEDS.

In each of the two large general hospitals—Crumpsall and Withington—the city maintains a maternity unit. These together provide 209 beds.

In addition to these the Public Health Committee maintains eight maternity beds (2 in St. Mary's Hospital for first and abnormal cases, 2 in Denison House, 2 in Crossley Hospital, and 2 in Beech Mount). 211 applications were received for these beds. 27 of these were cancelled and 1 was not accepted, as the applicants resided outside the city area. Of the 183 remaining, 121 were confined during the year.

## CHILD LIFE PROTECTION.

(Public Health Act, 1936.)

*Children Nursed for Hire or Reward.*

[illegible]

*Details as to the number of children who ceased to come under the Child Life Protection provisions of this Act.*

Returned to parent or relative	..	..	..	..	..	..	..	..	..	..	..	142
Attained the age of 9 years	..	..	..	..	..	..	..	..	..	..	..	8
Sent to special homes	..	..	..	..	..	..	..	..	..	..	..	6
Removed to other districts	..	..	..	..	..	..	..	..	..	..	..	15
Admitted to hospitals	..	..	..	..	..	..	..	..	..	..	..	18
Deaths	..	..	..	..	..	..	..	..	..	..	..	—
Transferred to Education Committee (boarded-out-children)	..	..	..	..	..	..	..	..	..	..	..	—
Adopted without payment	..	..	..	..	..	..	..	..	..	..	..	29
Taken for trial period with view to adoption	..	..	..	..	..	..	..	..	..	..	..	—
Evacuated	..	..	..	..	..	..	..	..	..	..	..	6
												224

*Licences Granted.*

[illegible]

*Adoptions.*

By foster-mothers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13
By other persons	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16
															29

## WORK DONE BY THE HEALTH VISITORS.

### *Notification of Births Act.*

The total number of notifications received under the Notification of Births Act was 10,929. A certain number of these were notified from Blackpool and Prestbury, the mothers being Manchester evacuees.

The following table shows the source of notification and the place of birth:—

By whom notified	Place of Birth						Total	
	Manchester		Blackpool		Prestbury			
	Live	Still	Live	Still	Live	Still	Live	Still
Doctors or Institutions ..	5,597	335	528	5	288	18	6,413	358
Midwives .. .. .	4,036	122	—	—	—	—	4,036	122
	9,633	457	528	5	288	18	10,449	480
							10,929	

### Infantile Mortality and Young Child Mortality.

1—2 Years and 2—5 Years per 1,000 Births.

*Quinquennial Periods, 1900—1939.*

Average—5 years	Infantile Mortality	Child Mortality 1—2 years	Child Mortality 2—5 years
1900—1904 .. .. .	178.8	53.8	41.0
1905—1909 .. .. .	152.7	46.2	35.9
1910—1914 .. .. .	133.5	44.3	35.3
1915—1919 .. .. .	111.1	40.3	39.8
1920—1924 .. .. .	94.6	31.2	22.1
1925—1929 .. .. .	91.3	28.2	23.1
1930—1934 .. .. .	78.4	18.9	17.7
1935—1939 (5 years) .. .. .	72.7	12.0	12.3

### *Still-births.*

The health visitors visited the mothers of 335 still-born children occurring in the practice of doctors and midwives and in the city hospitals.

### *Ante-natal Care.*

478 still-births and 294 neo-natal deaths occurred in the city. 712 special visits were paid by the health visitors to these mothers and in this way 59 expectant mothers were brought to our notice. These were revisited at intervals of one month, a total of 164 such visits being paid.

The health visitors made 8,350 visits to expectant mothers discovered in the course of routine home visits. Many of these subsequently attended the ante-natal clinics. Altogether 11,028 visits were made by the health visitors to expectant mothers, many of these being made to arrange for their evacuation under the Government's "trickle" scheme to Blackpool and Prestbury.

### Work at Monsall Disinfecting Station.

#### Vermin.

The Education Department is the main source of notification of verminous cases. The following table gives comparative figures from all sources for the last four years.

	Year			
	1938	1939	1940	1941
School Medical Officer .. .. .	469	252	1,155	1,029
General Practitioners .. .. .	—	—	6	17
Voluntary and Municipal Hospitals.. .. .	—	1	3	2
Centre Medical Officers .. .. .	4	15	16	11
Health Visitors .. .. .	24	7	60	441
Applied for Voluntary Treatment .. .. .	14	17	23	31
Discovered at Monsall .. .. .	—	—	28	17
Salvation Army .. .. .	—	—	31	25
Refugees .. .. .	—	—	89	—
H.M. Forces .. .. .	—	—	22	35
Rest Centre .. .. .	—	—	—	1
Total .. .. .	511	292	1,433	1,605

241 school children were compulsorily cleansed and 299 adults applied for voluntary cleansing.

#### SCABIES.

Circular 2517 issued by the Ministry of Health in November strengthens the powers of local authorities in combating the increase of scabies and verminous conditions which has resulted from war-time conditions.

The main source of notification of scabies is the Education Department. Many additional cases are, however, brought to our notice either as contacts of those notified by the School Medical Officer, or as new cases.

The source of these notifications is shown as follows :—

	Year			
	1938	1939	1940	1941
School Medical Officer .. .. .	938	713	1,404	2,702
Booth Hall Hospital .. .. .	—	—	1	16
General Practitioners .. .. .	102	160	392	1,126
Centre Medical Officers .. .. .	35	22	101	254
Health Visitors .. .. .	92	66	219	1,030
Discovered at Monsall .. .. .	23	59	6	50
H.M. Forces .. .. .	—	12	71	98
Salvation Army .. .. .	—	—	2	4
Refugees .. .. .	—	—	25	3
A.R.P. Workers .. .. .	—	—	17	8
Voluntary Hospitals .. .. .	40	15	14	—
Skin Hospital .. .. .	—	—	582	1,062
Applied voluntarily .. .. .	60	135	213	337
Shelters .. .. .	—	—	—	2
Rest Centres .. .. .	—	—	—	13
Total .. .. .	1,290	1,183	3,047	6,705



The average number of treatments per person is three. 4,220 persons were treated and 11,675 treatments given. This is shown in the following table :—

Year	Males (adult)	Females (adult)	School Children	Children under 5 years	Total
1938 .. .. .	598	1,167	268	605	2,638
1939 .. .. .	679	686	339	578	2,282
1940 .. .. .	1,350	2,544	748	1,436	6,078
1941 .. .. .	3,079	5,485	474	2,637	11,675

The general comments made in the report for 1940 apply equally to the work during this year. The part-time nurses at Monsall were required to work 255 sessions, out of which 204 were evening sessions to suit the convenience of workers who could not attend during the day.

Of 3,390 households in which scabies occurred, 3,214 agreed to the disinfection of bedding and other articles and 176 refused.

### INFLUENZA AND PNEUMONIA.

121 cases of influenzal pneumonia were notified and 22 discovered through the death returns, a total of 143 cases.

#### PNEUMONIA.

During 1941 the following notifications of pneumonia were received :—

Primary pneumonia	{ Lobar .. .. .	1,132	
	{ Lobular .. .. .	406	
	{ Unclassified .. .. .	16	
		<hr/>	1,554
Influenzal pneumonia	.. .. .	.. .. .	121
Secondary pneumonia	.. .. .	.. .. .	77
			<hr/>
Total	.. .. .	.. .. .	<u>1,752</u>

In addition to the above, however, 371 deaths from pneumonia—345 primary and 26 influenzal, all being un-notified cases—were brought to the notice of the department through the death returns : thus the total number of known pneumonia cases for the year was 2,123 as compared with 2,140 for the previous year.

#### Primary Pneumonia.

Of the 1,899 known cases of primary pneumonia, 1,251 were classified as lobar pneumonia, 626 as lobular pneumonia, and 22 simply as pneumonia. The number of cases which were investigated was 1,746, and of these the case-fatality was 13.00 per cent. for lobar pneumonia, and 18.56 per cent. for lobular pneumonia, as compared with 19.81 per cent. for lobar pneumonia and 46.75 per cent. for lobular pneumonia in 1940.

#### Secondary Pneumonia.

Secondary pneumonia is not notifiable, but the attention of the department has been directed to 77 cases during the year. Of these 76 were investigated and were associated with the following diseases :—

Measles .. .. .	14
Whooping cough .. .. .	60
Measles and whooping cough .. .. .	1
Parturition .. .. .	1
	<hr/>
	76

The case-fatality rate was 17.1 per cent., an increase on the rate for the previous year, when it was 6.25 per cent. With 9 exceptions the patients were all children under 5 years of age.

## MILK CONTROL.

### *City Farms.*

There are 47 farms in the city with milch herds, including one producing Tuberculin Tested (Certified) milk and 11 producing Accredited milk. Regular inspections have been carried out by the Milk Control Inspectors at each farm, particularly at milking times, and samples of milk have been taken for examination for tubercle bacilli and cleanliness. The milk at 7 of the city farms was found to contain tubercle bacilli and the necessary action was taken.

Over 80 per cent. of the quarterly samples of milk from the 12 designated farms, examined for cleanliness, have been found to be satisfactory. 106 visits have been paid to city farms by the Ministry of Agriculture's Veterinary Inspectors, the number of cows examined being 2,417.

### *City Dairies, Milk Bars and Milk Shops.*

The Milk Control inspectors have paid nearly 3,000 visits to dairies, milk bars and milk shops. The inspection and checking of the pasteurising plants at the dairies licensed for this purpose have been carried out at least once monthly, in addition to routine visits.

### *Ice Cream.*

755 premises are registered for the manufacture and/or sale of ice cream. The inspectors made 580 visits and found the general standard of cleanliness to be good. 5 applications for registration were approved and none was refused.

11 samples were taken from bulk manufacturers for bacteriological examination.

### *Manchester Corporation's Hospitals Milk Supply.*

Frequent examination of samples of pasteurized milk supplied to the Corporation hospitals and institutions has been made and the results on the whole have been satisfactory.

The raw milk supplied to Monsall Hospital and Booth Hall Hospital has also been sampled frequently. On two occasions the milk supplied to the former hospital was found to be infected with *b. tuberculosis*. The milk, therefore, was pasteurized for a period until the source of infection had been removed. In all other respects the supply has been satisfactory.

### *Raw Milk Supply.*

The condition of much of the raw milk supply reaching the city continues to be bacteriologically unsatisfactory. A high proportion of the samples of milk from outside country farmers, taken on arrival at Manchester dairies, revealed excessive bacterial counts, persistent presence of bacterium coli, and in many instances, high temperatures, indicating unsatisfactory methods of production and inadequate, or lack of, cooling at the farms, etc.

In each case particulars of the analyses of these unclean and uncooled milks were forwarded to the M.O.H.'s of the areas producing the milk.

**TABLE I.**

### **Particulars of Milk Samples.**

#### *Samples examined for Tubercle Bacilli.*

	No. of samples taken	No. found to contain tubercle bacilli
Collected by Food and Drugs inspectors at :—		
(a) Railway Stations .. .. .	—	—
(b) Vehicles entering the city by road .. ..	454	36*
Collected by Milk Control inspectors at :—		
(a) Hospitals and Institutions .. .. .	74	2
(b) City dairies, milk shops, and milk bars ..	159	7
(c) Vehicles .. .. .	345	31*
(d) City farms .. .. .	103	8†
(e) Schools .. .. .	31	—
Samples taken at Abergele Sanatorium farm .. ..	13	—
Total .. .. .	1,179	84

\* Includes 2 Control samples.

† Includes 1 Control sample.

#### *Samples examined for Chemical and Bacteriological Analysis.*

Collected at hospitals, dairies, schools, etc. : 1,157.



**TABLE II.**  
**Analysis of Farms tested for Tubercle Bacilli.**

County	No. of farmers represented by samples of milk	No. of farmers sending tuberculous milk	Percentage
Cheshire .. .. .	337	37	10.98
Lancashire .. .. .	123	16	13.01
Derbyshire .. .. .	28	—	—
Staffordshire .. .. .	93	7	7.53
Yorkshire .. .. .	24	—	—
Montgomeryshire .. .. .	1	—	—
Total .. .. .	606	60	9.90

**TABLE III.**

**Food and Drugs Act, 1938, and Milk and Dairies Orders.**

Registered farm premises and dairies, December 31st, 1941 .. ..	122
Registered milk shops, December 31st, 1941 .. .. .	781
Persons registered for the sale of milk in properly closed bottles only, December 31st, 1941 .. .. .	1,218
Visits to farms, dairies, milk shops, etc., by Milk Control Inspectors..	2,680
Applications for registration approved .. .. .	196
Applications for registration refused .. .. .	—
Persons removed from register by resolution of City Council ..	—

**TABLE IV.**

**Milk (Special Designations) Regulations, 1936-41.**

*Licences Issued during the Year.*

Producer's licence to use the designation "Tuberculin Tested" ..	1
Dealer's licence to use the designation "Tuberculin Tested" ..	38
Producer's licence to use the designation "Accredited" .. ..	11
Dealer's licence to use the designation "Accredited" .. .. .	15
Dealer's licence to use the designation "Pasteurized" :—	
(a) Pasteurizing establishments .. .. .	15
(b) Shops .. .. .	3
Supplementary licence to use the designation "Tuberculin Tested"	3
Supplementary licence to use the designation "Accredited" ..	—
Supplementary licence to use the designation "Pasteurized" .. ..	4



TABLE V.

## Tuberculous Infection in Milk, 1901-1941.

YEAR	Number of farmers represented by samples of milk	Number of farmers sending tuberculous milk	Percentage	Percentage of Farmers from EACH COUNTY whose milk was proved to contain Tubercle Bacilli							
				Cheshire	Derbyshire	Staffordshire	Shropshire	Lancashire	Yorkshire	Cumberland	Montgomeryshire
Total for 41 years (1901—1941)	21,990	2,462	11.20								
1939	811	90	11.10	12.47	7.02	12.62	—	10.37	—	—	—
1940	650	71	10.92	10.97	11.29	14.29	—	9.09	8.57	—	100.00
1941	606	60	9.90	10.98	—	7.53	—	13.01	—	—	—

TABLE VI.

## Graded and Un-graded Milks (Tuberculosis Rate).

	TUBERCULIN TESTED	ACCREDITED	PASTEURIZED	UNGRADED	TOTAL MILKS
No. of samples taken	37	98	223	821	1,179
No. found to contain tubercle bacilli ..	—	10	1	73	84
Percentage .. ..	—	10.20	0.45	8.89	7.12

NOTE.—The tuberculosis rate for “Accredited” milk given above is apt to be rather misleading. It does not represent truly the amount of tubercle bacilli found in this grade of milk, inasmuch as a large quantity of milk from “Accredited” herds is sold as ordinary ungraded milk and is, therefore, included in the “Ungraded Milk” figure.

## SANITARY SECTION.

## Food Supervision.

Samples procured (representing 126 different articles of food and drugs)	3,562
Samples contravening Food and Drugs Act and Regulations (equivalent to 4.91 per cent. of the total samples) .. .. .	175
Milk samples analysed .. .. .	1,634
Milk samples adulterated (equivalent to 9.73 per cent. of the samples analysed) .. .. .	159

## Public Health (Condensed Milk) Regulations, 1923 and 1927.

## Public Health (Dried Milk) Regulations, 1923 and 1927.

Samples of condensed milk examined .. .. .	9
Samples of condensed milk contravening the regulations .. ..	Nil
Samples of dried milk examined .. .. .	23
Samples of dried milk contravening the regulations .. .. .	Nil

**Artificial Cream—Section 28, Food and Drugs Act, 1938.**

Registered premises at 31st December, 1941.. .. . 2

Since 9th December, 1940, the manufacture of artificial cream has been prohibited by the Synthetic Cream (Restriction) Order, 1940, made by the Minister of Food.

**Registration of Factories and Wholesale Premises—Section 34, Food and Drugs Act, 1938.**

(a) Margarine factories : On register .. .. .	1
(b) Wholesale dealers in margarine : On register .. .. .	106
(c) Butter factories : Premises on register .. .. .	2
Visits paid to registered premises .. .. .	108

**FOOD PREPARATION PREMISES.****Section 14 (Food and Drugs Act, 1938).**

Premises on register at 31st December, 1940 .. .. .	461
Premises registered during the year .. .. .	12
Premises discontinued during the year .. .. .	27
Premises on register at 31st December, 1941 .. .. .	446
Inspections during 1941 .. .. .	1,224
Instances where minor defects or dirty conditions were remedied ..	89

**BAKEHOUSES.**

On register at 31st December, 1940 .. .. .	538
Registered during 1941 .. .. .	3
Removed from register during 1941 .. .. .	32
On register at 31st December, 1941 :—	
Above ground .. .. .	503
Underground .. .. .	6
Inspections .. .. .	2,820

**RESTAURANT AND CAFE KITCHENS.**

Restaurant and cafe kitchens recorded in the department at 31st December, 1941 .. .. .	275
Inspections .. .. .	1,833
Minor defects or dirty conditions remedied after caution .. .. .	38

**HOUSING ACTIVITIES.***Corporation Estates.*

Occupied houses (excluding tenement dwellings) on Corporation Estates at 31st December .. .. .	29,318
Occupied flats at 31st December .. .. .	1,805
Tenement dwellings at 31st December.. .. .	951

**HOUSE INSPECTION.***Housing Act, 1936, and Housing Consolidated Regulations.*

Systematic house inspection has been suspended owing to the war.

*Public Health (and local) Acts.*

Primary inspections as a result of complaints or investigation of infectious disease .. .. .	10,759
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The defects found on inspection have been dealt with as follows :—

(a) Remedied as a result of the service of preliminary notices at 1,929 houses	
(b) Statutory notices served under Public Health (or local) Acts with regard to .. .. .	1,882 houses
Remedy effected by the owners at .. .. .	1,205 houses
Remedy effected by the local authority in default at .. .. .	307 houses
At 31st December, 1941, notices were outstanding with respect to .. .. .	370 houses
House inspections (including revisits) for all purposes.. .. .	51,288

Remedy of urgent defects at houses scheduled to be dealt with under the Housing Act, 1936 :—

Preliminary notices or intimations served on the owners with regard to .. .. .	1,226 houses
Work effected at .. .. .	722 houses

**Houses-let-in-Lodgings.**

Houses-let-in-Lodgings at 31st December, (including 348 which are "farmed" houses) .. .. .	886
Inspections made with regard to compliance with the byelaws .. .. .	3,644
Infringements of the byelaws remedied as a result of verbal cautions .. .. .	75



# Housing Conditions, Year ended 31st December, 1941.

## General Statistics.

1. Inspections of dwellinghouses during the year :—			
(1) (a)	Total number of dwellinghouses inspected for housing defects (Public Health Act) .. .. .	10,788	
(b)	Number of inspections made for the purpose .. .. .	45,841	
(2) (a)	Number of dwellinghouses (included in sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations 1925 to 1932 .. .. .	—	
(b)	Number of inspections made for the purpose .. .. .	—	
(3)	Number of dwellinghouses found to be in a state so dangerous or prejudicial to health as to be unfit for human habitation	—	
2. Remedy of defects during the year without service of formal notices :—			
	Number of defective dwellinghouses repaired in consequence of informal action by the local authority or their officers .. .. .	1,929	
3. Action taken under Statutory Powers during the year :—			
(A) Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936 :—			
(1)	Number of dwellinghouses in respect of which notices were served requiring repairs .. .. .	—	
(2)	Number of dwellinghouses in which defects were remedied after service of formal notices :—		
(a)	By owners .. .. .	—	
(b)	By local authority in default of owners .. .. .	—	
(B) Proceedings under Public Health Acts :—			
(1)	Number of dwellinghouses in respect of which notices were served requiring defects to be remedied .. .. .	1,882	
(2)	Number of dwellinghouses in which defects were remedied after service of formal notices :—		
(a)	By owners .. .. .	1,205	
(b)	By local authority in default of owners .. .. .	307	
(C) Proceedings under Sections 11 and 13 of the Housing Act, 1936 :—			
(1)	Number of dwellinghouses in respect of which demolition orders were made .. .. .	2	
(2)	Number of dwellinghouses demolished in pursuance of demolition orders .. .. .	188	
(D) Proceedings under Section 12, Housing Act, 1936 :—			
(1)	Number of separate tenements or underground rooms in respect of which closing orders were made .. .. .	Nil	
(2)	Number of separate tenements or underground rooms in respect of which closing orders were determined the tenement or room having been rendered fit .. .. .	Nil	

## FACTORIES.

*Inspection of Mechanical and Non-Mechanical Factories, etc., under the Factories Act, 1937.*

Premises	Number of		Occupiers prosecuted
	Inspections	Written Notices	
Factories (with mechanical power) .. .. .	3,249	—	1
Factories (without mechanical power) .. .. .	555	—	—
Total .. .. .	3,804	—	1



**Outworkers.**

Firms in the City employing outworkers at 31st December, 1941 ..	238
Outworkers employed in the City at 31st December, 1941 .. ..	1,116
Outworkers employed by City firms who reside in districts of other local authorities .. .. .	372
Total outworkers .. .. .	1,488
Inspections of homes of outworkers .. .. .	2,080
Minor defects or dirty conditions found .. .. .	19
Minor defects or dirty conditions remedied .. .. .	19

**Shops Acts, 1912-1936.***Shops Act, 1912.*

Orders made by the City Council for exemption from compulsory closing or for "fixing the closing day" or for "fixing the closing hours" .. .. .	46
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*Shops Act, 1934, Section 10.*

Shops on register .. .. .	19,174
Visits by shops inspectors for the purposes of the Act .. ..	668

**Water Supplies.***Town's Water.*

Sources of supply—impounding reservoirs in the Lake District and Longdendale (Yorkshire-Derbyshire border).

In the Crumpsall district two cottages are supplied with water from a spring and in parts of Wythenshawe wells provide the source of supply. All other houses in the City are furnished with Town's water.

Water samples taken during 1941 :—

For bacteriological examination .. .. .	52
For chemical examination .. .. .	53

Routine sampling of water, in various stages of supply is undertaken also by the Waterworks Department. This department and the Public Health Department communicate results of analyses reciprocally.

Reports were referred to the Waterworks Department with regard to 34 houses where the pressure of water was inadequate.

*Well Water.*

Two wells supplying two houses in the Wythenshawe District are considered to be satisfactory.

The remaining 16 wells supplying 23 houses in the district are situated at such a distance from the nearest service main as to render the provision of town's water impracticable. The tenants in these instances have been advised to boil all water intended for drinking purposes.

**HOUSING ACT, 1936.****Slum Clearance.**

With the exception of two houses, which were dealt with under Section 11, Part II., of the Housing Act, 1936, no houses have been represented to the City Council during the year as unfit for human habitation.

Clearance Area work under Part III. of the Housing Act, 1936, has continued only to the extent of the demolition of property which has become dangerous and the rehousing of the occupants.

*Demolition of Properties.*

The following figures refer to property demolished during the year :—

(a) In Clearance areas .. .. .	188 dwellinghouses.
(b) Without formal action .. .. .	190 ..
(c) By enemy action .. .. .	1,841 ..

Displacement of persons from Clearance Areas—668.

## Summary of Slum Clearance Action to the end of 1941.

(Ministry of Health Return, Form 256).

	Dwelling-houses Demolished	Persons Displaced
Clearance areas .. .. .	8,479	33,576
Individual houses .. .. .	132	432
In addition to this return, the following houses have been demolished without formal action .. .. .	2,552	10,208
Totals .. .. .	11,163	44,216

## Eradication of Bed Bugs.

The sub-joined table is included to comply with Circular 1728 of the Ministry of Health, issued in 1938, with regard to the action taken for the eradication of bed bugs in dwelling-houses :—

Houses	Houses found to be infested	Houses Disinfested (includes Carry-over from 1940)
Council .. .. .	100	70
Other .. .. .	275	333
	375	403

## RATS AND MICE (DESTRUCTION) ACT, 1919.

*Complaints.*

541 complaints of the presence of rats or mice, affecting 1,594 premises, were dealt with.

*Conditions Found.*

1,074 of the premises were infested with rats, 475 with mice, and at 45 premises no evidence of rats or mice could be found.

At 306 (28.49 per cent.) of the 1,074 rat-infested premises, rats had obtained ingress to the interior of the buildings and at 768 (71.50 per cent.) infestation was confined to yards, passages, land, and gardens.

*Prevention of Re-infestation.*

Rat-proofing was carried out at 677 premises; at 488 by occupiers, 188 by owners, and 1 by rat-catcher.